Design

Typewriters p.31

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Contents

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Design

'Designers in Britain'

IN HIS FOREWORD to the latest volume of DESIGNERS IN BRITAIN,* Ashley Havinden, the immediate past-President of the Society of Industrial Artists, puts his finger on a little-sung attribute of industrial design which possibly adds up to more than all the familiar arguments for employing qualified designers in industry. He suggests that, among other things, the designer's rôle is "to stimulate mass enthusiasm for twentieth-century production".

If there is one thing that modern industry needs in this twentieth century it is a background of public enthusiasm for manufacture and production. No visitor to the States can be unimpressed by the extent to which American production and industrial technology have become the daily bread of self-congratulation as much for the humble citizen as for the men immediately concerned with industry; nor can he escape the fact that new products make news. American newspapers review the new designs from the factories as ours review new plays and films. The American public, ever eager to have a go and to try anything once, is the confederate of American industry in launching new ideas on the market; and the American designer, whether industrial or graphic, has become the link between the two. He is thus under great pressure to produce new shapes and forms and patterns even for familiar, common or garden objects. Fashion and novelty are often the spur and good design to some extent the victim, but, criticise as we may, the American designer has certainly played his part in stimulating mass enthusiasm for twentieth-century production. Some recently published figures of business passing through American design offices suggest that his contribution may in fact be only just beginning.

In Britain the tempo is slower, traditions older and deeper, but here too the public is becoming aware that new hands and brains are at work in many factory studios and drawing offices; British shoppers are beginning to seek out the products of named designers.

No publication could be more valuable for this search than DESIGNERS IN BRITAIN, the very selective, biennial review of current British designs compiled by the Society of Industrial Artists. It is certainly the clearest (the present volume is again admirably laid out, this time based on a grid which is reproduced on the end papers) and perhaps the most comprehensive guide to who is designing what for whom. It is equally a pretty clear guide, unless the editors have fallen down on their job, to those industries which should start thinking about employing designers, for the coverage in the industrial sections is pointedly uneven.

*DESIGNERS IN BRITAIN 4, edited by Herbert Spencer, Allan Wingate, 45s.

POINTS and POINTERS

SOMETHING NEW Firm confirmation that competition in the American market is daily growing stronger comes from a recent issue of the WALL STREET JOURNAL. To satisfy their clients and attract the business of new ones American consultant designers are, as the JOURNAL puts it, "dreaming up new and improved products, so much better than those you already own that you'll become disgruntled enough to buy the new ones".

Designing for artificial obsolescence in order to create dissatisfaction among the public is by now a familiar story. In times of slump or intense business competition the normal evolutionary pattern of design development tends to go by the board and novelty for its own sake becomes the criterion. Instead of exploring fresh possibilities in materials and methods extraneous influences on public taste are counted important. A well-known American consultant designer is quoted as saying that he is even watching science fiction as one of the many sources to help meet manufacturers' demands for new design ideas.

In the American field of furniture there seems to be equal anxiety for something different. A writer in HOUSE BEAUTIFUL exclaims "Modern is dead! Long live *post-modern*!" and goes on to suggest that 'Modern' merely denotes design of the last 50 years, and should go into museum storage along with other historical styles. So much, then, for the Modern Movement as we understand it, a constantly developing style that has roots in the nineteenth century and takes no notice of 1950, or any other convenient date. Styles do not die when people get tired of calling them by their proper names.

ALBERT MEDAL Sir Ambrose Heal, head of Heal & Son Ltd, has been awarded the Royal Society of Arts Albert Medal for 1954, for services to industrial design. The medal was created in 1864, yet this is the first time it has been won by a designer for industry. The award has been made with the approval of HRH the Duke of Edinburgh, President of the Society. In 1939 the Council of the Society appointed Sir Ambrose a Royal Designer for Industry.

SCOTTISH ENTERPRISE After an interval of five years another 'Scottish Industries Exhibition' will be held in Kelvin Hall, Glasgow, from September 2–18. The diversity of industry in Scotland will be stressed with exhibits from over 300 firms. A special feature in Kelvin Hall will be elaborate displays, including mannequin parades held in the central avenue which holds 2,500 people.

It is claimed that of all new factories started by North American concerns in the whole of the United Kingdom since the end of the war, well over three-quarters have been set up in Scotland. Everything on show must have been made in Scotland, and the organisers are to place special emphasis on new products and new designs. Further information can be obtained from the Manager for the promoters, the Scottish Council (Development and Industry), 16 Woodside Terrace, Glasgow. In our November issue we hope to include a review of new designs at the exhibition.

PATRON Sir Colin Anderson is the first recipient of the Bicentenary Medal, an award recently instituted by the Royal Society of Arts. Twenty years ago Sir Colin, a director of the Orient Line, had the courage and foresight to insist on a high standard of design in the interiors of his company's ships. The policy was carried through in association with his architect, Brian O'Rorke, for as many as five Orient ships, the last of which, the 'Orsova', was the subject of an article in our May issue. The Bicentenary Medal has been awarded to Sir Colin Anderson, a recently reappointed member of the Council of Industrial Design, for eminent service to the cause of good design.

ADVICE FOR DESIGNERS Although many manufacturers have complained that designers are often amateurs when it comes to tackling technical problems of production, few, if any, trade associations have organised free instruction and advice for designers, artists and students wishing to enter their field. To do so would seem an eminently sensible step from all points of view, but how many trades will follow the lead lately given by the Collapsible Tube Manufacturers' Association? And how many designers or schools will now take advantage of this association's intelligent offer? (See page 42.) They urge–and so do we–designers, students and teachers to apply for further information to the Secretary, Collapsible Tube Manufacturers' Association, 47 Welbeck Street, London W1.

ARTIST versus ENGINEER

L. Bruce Archer *

In making his case for the urgent need for artist-engineers in industry the author deliberately stresses the sceptical attitude of some industrialists and many engineers towards the designer. We believe that British industry has in recent years shown increasing understanding of the role of industrial design and our designers an increasing understanding of engineering problems. In this critical article Mr Archer discusses the question from both sides and suggests new ways of training artist-engineers.

WHY IS THERE SO MUCH SCEPTICISM and hostility in Britain towards industrial design? Despite the very considerable volume of boost and publicity afforded for many years to the concept of art in industry, only a mere handful out of the countless new models launched every year can be properly attributed to it. Within industry, and even within those companies which have used industrial designers with apparent success, the term must usually be spoken gently at the end of a technological discourse if it is to escape argument and mockery.

Anyone who has discussed these matters extensively in a variety of trades will admit that, although some genuine enthusiasm may be displayed in board rooms, at lower levels the attitude may vary from lip service to plain antagonism. Many an experienced man in an influential position will argue convincingly that a design which is right will be good-looking; that conscious attention to appearance design is retrograde; that quality sells; and above all, that he needs no ex-architect or theatrical designer to instruct him in his business. This attitude does not persist without good reason, and there is much to be gained by its examination.

Firstly, there seems to be a serious misconception, especially amongst engineers and company executives, but also amongst industrial designers themselves, concerning the meaning of the term 'Industrial Design'. On the one hand there is a widespread belief that it signifies streamlining, styling, applied decoration – the wrapping of a mechanism in an all-enfolding jacket. On the other is intellectural snobbery, which will claim that a single man can better the design of anything, from an automobile to a price tag. These misconceptions are assisted by the loose application of the one title 'Industrial Designer' to a wide variety of men and women who may be specialising in typography, package design, glassware, jewellery, textiles, furniture, domestic appliances, machine tools or

* Director of Scientists and Technologists Engineering Partnership Limited; visiting lecturer at the School of Industrial Design, L C C Central School of Arts and Crafts.

automobile body styling. Although the general cultural trends of the day must be reflected in all these fields, each industry and trade is far too complex for a designer to master more than one, and any claim to the contrary will only sharpen the antagonism of the specialist. In an ideal state, designers should mingle freely and interchange ideas. Indeed, probably the greatest service which can be rendered to the community by industrial designers – and especially by consultants – is the bringing in to one trade of ideas and methods which have been proved successful in another. A sense of fellowship between the various branches of industrial design promotes this valuable condition, but the time has surely come when the different forms of industrial design must be clearly distinguished, if only to permit the industrialist to know when he is in danger of employing the wrong man for a given job.

Engineering language

A second major factor in the creation of hostility is the frequent inability of industrial designers and technicians to speak a common language. This difficulty occurs most frequently in the field of design for the engineering industry, rather than in, say, furniture and textiles, where relations appear to be much better. Although it is agreed that designers, sculptors and artists of all kinds should mingle in the world of aesthetics, and would then speak in its proper context the language of art, the designer for the engineering industries must live the greater part of his life in a world of technology, where he must converse in the language of engineering. Too often an industrial designer is foolish enough to present technicians with "pretty pictures which any commercial artist could have drawn", when his working drawings and conversation do not exhibit those conventions and usages by which engineering finesse is judged.

This language of engineering, especially as expressed by draughtsmanship, is a precise and world-wide code which every technologist can understand, but which is a shibboleth for tyros. It is no wonder that arguments for harmony of texture and significant form will be rejected if the speaker is unable or unwilling to comment, equally and in the proper terms, on manufacturing tolerances and tooling.

The third, and probably the greatest, source of friction, however, is the existence of jealousy in the hearts of engineering staffs. It must be understood that historically, and to this day, the vast majority of designs originate upon the boards of engineering draughtsmen. A high proportion of current good design is carried out by men known to themselves and to their employers as engineering designers who, nevertheless, possess a marked aesthetic faculty. It is quite natural that such men should react to the intrusion of a rare new bird into their domain who carries the privilege of personal recognition which is seldom accorded to themselves. In consequence they resent the technically competent industrial designer who succeeds, and deride the unfortunate pretender who is seen to fail. It may be true that the artistically gifted engineering designer is the same animal as the true industrial designer, but the former stubbornly refuses to be placed in the same category as the artist or architect who is not an engineer at all.

Thus a great many of the best prospective industrial designers are not known by that name, with the result that an unduly high proportion of technical incompetence remains to give the whole profession a bad name. Other technologists, reacting to the situation, place more criticism and resistance in the way of an industrial designer than they would countenance towards a colleague of their own.

The result of all these factors is a confused situation, in which many industrial designers surround themselves with a haze of highbrow flimflam; in which engineers resist real or imaginary incompetence; in which industrialists find that the work of industrial designers can only be converted into fact by the most protracted efforts on the part of their own engineers; and in which the public has come to accept that good-looking design is necessarily expensive.

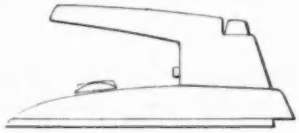
Unless the vicious circle can be broken, industrial design for the engineering industries will degenerate into a legend which may continue to be discussed in cultured circles, but which will find its practical expression only in the mobile sculpture of interior lighting fittings.

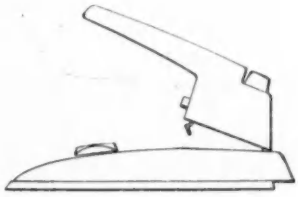
Defining the species

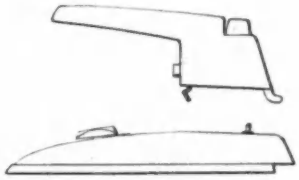
What can be done to clear the air? An obvious starting-point is the provision of means for distinguishing between the types of industrial designer. The term could perhaps be reserved for describing designers for the engineering industries, although this would seem hardly fair to those who have done so much to raise the prestige of industrial design in industries such as textiles, where it has achieved its greatest popular success. Nevertheless, those other branches have clear-cut and meaningful alternatives in the words 'Typographer', 'Textile Designer', 'Furniture Designer', and so on, whereas in the term 'Engineering Designer' are embraced immensely diverse fields.

When meeting clients many industrial designers continue to rest their cases on presentation drawings alone. By engineers, however, these are regarded as no more than artists' impressions which may involve any number of unknown difficulties of construction, and are therefore to be viewed with suspicion. In translating them into practicable terms, the design work is frequently laboured upon all over again.

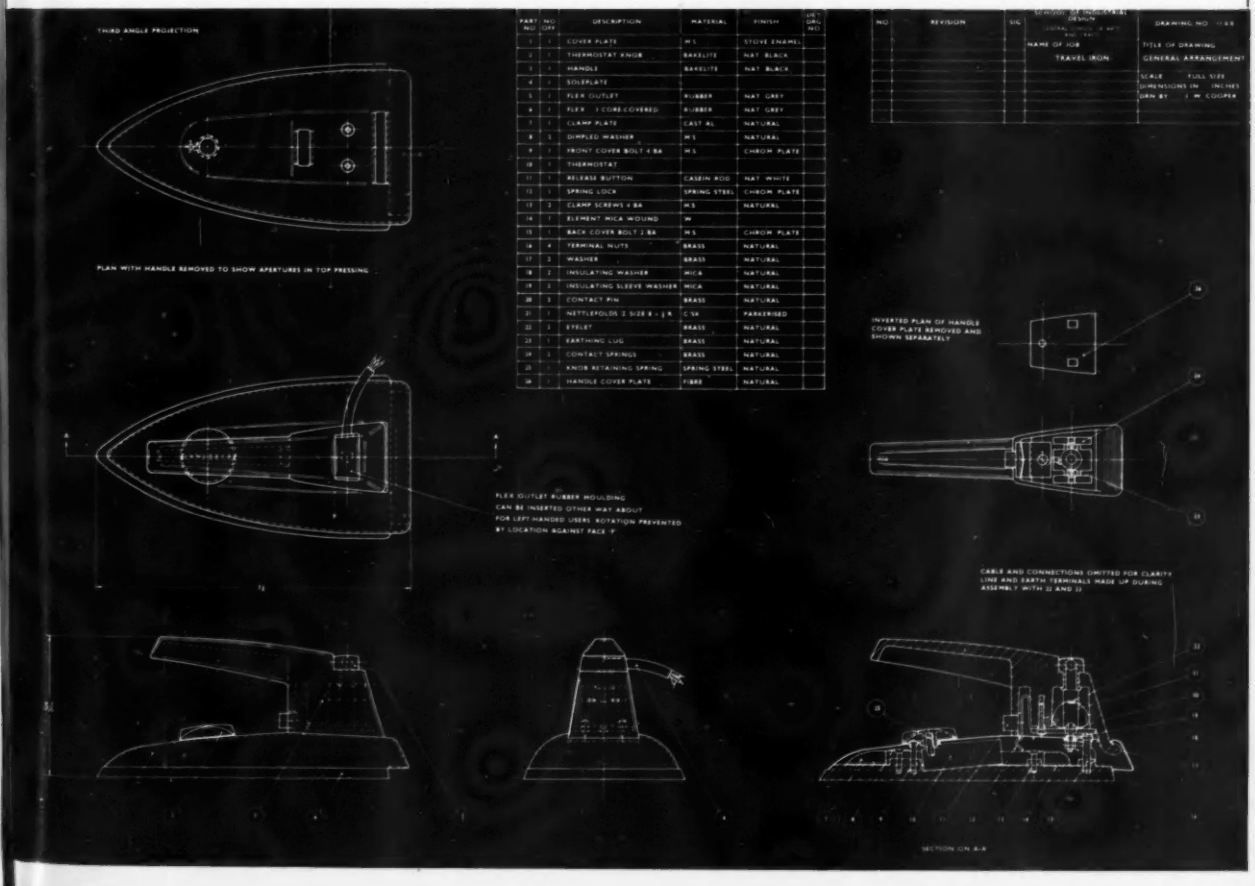
When a designer presents his work with a professionally laid-out general arrangement drawing, the production engineer at once feels that he is on common ground with a technically competent colleague. Possible snags can be identified at once, and the drawing sent for detailing without delay.







DESIGN AND DRAWING by John W. Cooper, School of Industrial Design, L C C Central School of Arts and Crafts, and reduced from full size



Perhaps a distinction could be made by adding, in parentheses, the industry for which an industrial designer has been trained – 'Industrial Designer (Typography)', 'Industrial Designer (Engineering)'. The latter version would probably win the greater number of adherents from those already in the industry, and would indicate the change of status which is necessary to persuade the appropriate engineers to adopt the name. There is no doubt that some such move would be warmly welcomed, at least in the engineering industries.

If an acceptable term could once be introduced, the way would then be open to the establishment of minimum standards of training and qualification by which the holder would be recognised. In setting up these standards, it should be accepted from the start that the industrial designer for engineering is essentially an engineering designer who possesses special prior or added knowledge of form and colour, just as other engineering designers possess themselves of special knowledge in electronics, chemistry, or structures. The aspiring industrial designer for the engineering industries should therefore have a full basic engineering training into which art, aesthetic appreciation and salesmanship enter as special subjects. The student might either be an artist on to whom engineering must be grafted, or he might be an engineer who must master art. In either case, none should be permitted to assume the title unless he could prove himself to be qualified in each capacity. If this condition were once imposed, then many of the most competent practitioners now known as engineering designers would join the ranks, and the whole attitude of industry towards the subject would undergo a dramatic change.

Methods of training

Before such moves could become effective, however, much remains to be done in the overhaul of schemes of training and in the recognition of certificates. There is some evidence that the artist can absorb his engineering more rapidly than the engineer can take to art, though this may be the effect, rather than the cause, of most schools of industrial design being attached to colleges of art. In technical schools, where hardly any comparable facilities exist, there is probably an untapped source of potential designers who have, as yet, no opportunity for the development of latent talent. On the other hand, in those art schools where training for industrial design is given, technology is often very weak, and their diplomas remain almost meaningless to industry.

There is no reason why schools of industrial design should not stand alone, drawing their recruitment from both sides of education and awarding their diplomas at a standard acceptable to industry. A significant pointer can be seen in the School of Industrial Design, L C C Central School of Arts and Crafts, where the technical side of the course is such that the Institution of Engineering Designers has recognised the National Diploma in Design (when obtained at that school) as an exempting qualification for admission to graduateship of the Institution. It has thus gone some way to giving effective status to a certificate which could distinguish the industrial designer for the engineering industries. It is notable that at this school students are drawn from the technical side, and even from practising engineering draughtsmen, as well as from the schools of art. In addition, a movement is afoot to urge the creation of a Higher National Certificate in Design for students who have obtained an ordinary National Certificate at a technical school and who go on to complete their studies in design. This parallels the award of the National Diploma in Design to students who have obtained their Intermediate at an art school and who have gone on to complete their technical studies for industrial design.

No amount of rechristening, planning or awarding of certificates will be effective, however, unless there is a clear demand from industry itself for the services of specifically qualified designers. On the whole, managements get the servants they deserve, and if suitable men are not forthcoming, the blame can usually be laid at the door of the employer. Industrial executives are possibly insufficiently aware of the influence that their demand has on the supply of trained technologists. It is personnel managers, rather than ministers of education, who determine the structure of further education. It is managing directors who decide which consultants shall live and which shall starve, but it is only by formulating clear demands and by rewarding success with adequate remuneration and public tribute that positive results can be expected. Merely to bemoan shortcomings or to allow resentment to simmer as at present, is the surest way to drive intelligent men with talent into other fields.

Scepticism and hostility towards industrial design exist mainly because designers and the men they seek to serve habitually speak above one another's heads. Let us get down to common ground and recognise that industrial design is not a new phenomenon. Snobbery on either side is the evil which creates resistance.

We should welcome comments on this article from our readers. – EDITOR

SITTING in COMFORT

Brigid O'Donovan

1

Last month we dealt generally with the new science of ergonomics and its use in industry. The following article is concerned particularly with seating, for it is not easy to decide just what are the best dimensions for comfort: it is not easy even to measure the human form. However, as recent research has shown, modern developments in instruments and in statistical techniques make the task feasible. Unfortunately results are somewhat incomplete and not readily available in this country. It is the purpose of this article to review the existing work briefly and to suggest a means of advance.

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1 Typist of average height, 5 ft 3 inches, sitting at a desk of very usual height, 28½ inches. She has had to raise her seat to 20 inches high to reach her typewriter in comfort, without raising the upper arm. Her feet rest on a bar, specially let into the desk, which is much too narrow and the wrong shape for comfort and proper support.

2 Here she is resting her feet on the floor as best she can. This position of the toes is often seen in offices and public vehicles.

3 A desk has been cut down to 24 inches and a typist's chair has been cut down (it will not screw down) to 16 inches. The average typist now has her back supported and her feet on the floor, the cheapest and most comfortable footrest. These heights are not necessarily the best for the general office: the best dimensions for the largest number of typists must be determined by research. It is possible that two sets of desk and chair, one rather lower than this, and the other a little higher, would cover most requirements.

4 A change of position, with the feet still on the floor.

A COMFORTABLE CHAIR should be the right size and the right shape to fit the sitter. If a number of people of different sizes have to use the same type of chair, then the chair should be made to fit as many of them as possible. This truth might seem self-evident, but it has been ignored for at least five centuries. Hard chairs have almost always been 18–19 inches high to match tables of 30–32 inches. It is only recently that it has been noticed that this is too high for all but the tallest men. Women are not catered for at all. Furthermore, backs of chairs are often too short and the wrong shape. Armchairs are generally too low, much too deep and often too soft. At work, where fatigue may seriously affect efficiency, conditions

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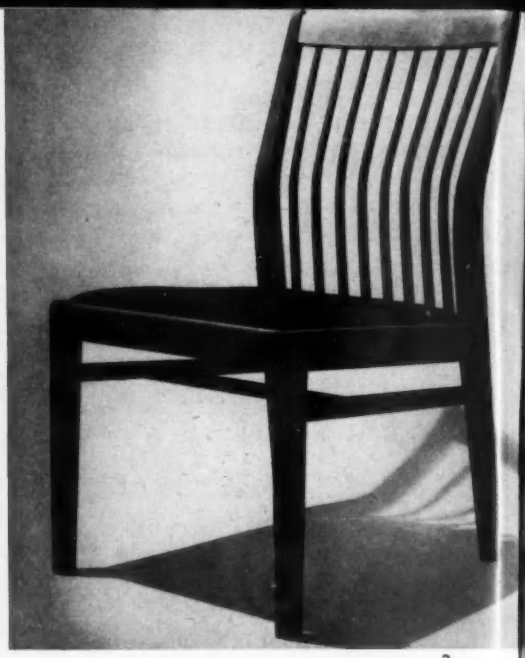

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are often worse than at home. Tables and benches are too high and generally obstruct the knees, while seats are too high, have no proper footstools, often have no backs, and may be altogether the wrong size and shape.

The only recent book on two fundamental aspects of seating research, posture and measurements, in English and on sale, is STANDING AND SITTING POSTURE, *with special reference to the study of chairs*, by Dr Bengt Åkerblom, published by A-B Nordiska Bokhandeln, Stockholm, 1948. Although it is becoming the standard work it is rather difficult for the general reader, but an easily understood summary can be studied in the patent specification relating to the author's chair.*

Precept into practice

Dr Åkerblom examined the behaviour of bones and muscles by X-ray and measured the amount of electrical activity of muscles in various positions with an electromyograph. A muscle shows increasing electrical activity when under increasing strain and none when at rest. He showed that the muscles of the back of the thigh are so soft that if the seat is too high the muscles are compressed, if necessary, almost to the thigh bone, and with those muscles the blood vessels and nerves, including the sciatic nerve, are also compressed. He concluded that a chair ought, therefore, to be low enough to prevent this compression and that it would be less uncomfortable to sit too low than too high. He measured the lower leg length when seated of 638 unselected men and women and decided that a general purpose chair to suit as many as possible of both sexes should be about 16 inches high.

Using the electromyograph he discovered that the muscles of the back show least activity in three positions, dropped forward with rounded shoulders, leaning slightly back against a lower back support, and leaning further back against a support for the whole back. Sitting upright without support was more fatiguing. He found that 16 inches was the best average depth of seat, if the seat was not to press into the calves (about the same as most chairs of today except, of course, armchairs). To prevent the body sliding forwards from the backrest, Dr Åkerblom recommended that the seat be very slightly tilted backwards, or covered in cloth to give rise to friction. The seat should be padded sufficiently to spread the weight over the weight-bearing part of the pelvis (the ischial tuberosities), but not so soft that the weight is spread further over the thighs.

Dr Åkerblom pointed out that in sitting the ischial tuberosities are not covered by muscle, but only by skin and tissue having a specially good blood supply, so that next to the hands and feet this small area is best adapted to taking weight. He advised that the seat of a chair should not be shaped to the figure so much as to impede alterations in position, because although certain positions are more advantageous than others, no single one can be maintained for long. He thought that the back of a chair should be at an angle and be padded or, at any rate, give slightly. The height of the table to fit a 16-inch chair he set at 28 inches. This appears high for the majority of the population sitting on a 16-inch seat, and seems to have been based on the measurements of the tallest men.

* No 640336, the Patent Office, W C 2, price 2s.

1 *Two Åkerblom chairs in the possession of the physiological section of the research branch of the Engineer-in-Chief's office, G P O, London.*

2 *On the left a chair designed by Gunnar Eklöf on Åkerblom principles. The seat is 16½ inches high and slopes slightly backwards. The back is 17 inches high and does not catch under the shoulder blades. It is unnecessarily wide from the comfort point of view, but the width helps to balance the appearance of the low seat and tall back. Beside it is an English chair made for the Ministry of Works. It is high, narrow, and has a short back which sticks into the sitter rather than supports him. The Åkerblom chairs belong to the GPO.*

TABLE I

The following table shows the approximate proportions of men and women who could sit comfortably on a seat of a given height or lower. If undesirable pressure is to be avoided, the height of the compressed seat should not be more than the length of the sitter's lower leg minus at least ½ inch. The table is based on Dr Åkerblom's measurements of the lower leg length when sitting, of 638 subjects adjusted for heels of 1 inch for men and 1½ inches for women.

The figures are in percentages.

	MEN	WOMEN
19 inches	1	–
18 „	19	2
17 „	43	16
16 „	34	45
15 „	3	33
14 „	–	4

Dr Åkerblom has patented certain chair measurements and in collaboration with the designer, Gunnar Eklöf, has developed several models. They are very pleasing in appearance and astonishingly comfortable, although the lumbar support appears to be too low and some have no padding. There is no record however that they have been tested extensively.

A more recent Scandinavian work ELECTROMYOGRAPHIC INVESTIGATION OF POSITION AND MANNER OF WORKING IN TYPEWRITING by Arne J. S. Lundervold,* bears out Dr Åkerblom's findings as to posture. No attempt was made to measure typists because it was considered that their tables and chairs should both be adjustable. A large number of electromyographic readings were taken of groups of muscles. The writer recommends that the typist's chair should be adjusted so that the writer, sitting with knees bent at right angles, has the whole sole of the foot planted well on the floor. The back support should be adjusted to give specially good support to that part of the spine which is most bent when the sitter leans forward. The table should be adjusted to suit the typist at a point where the upper arm can hang down freely when typewriting without being pressed against the writer's side.

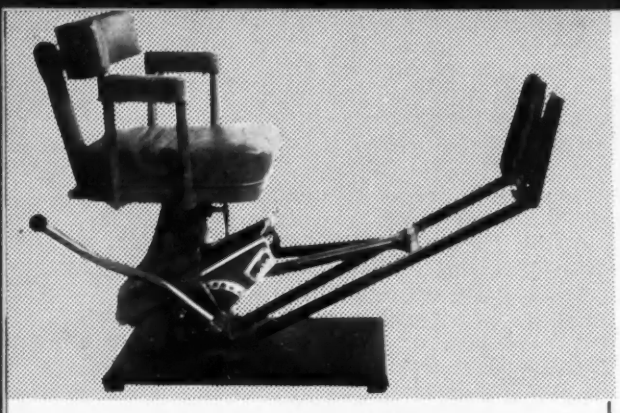
British research incomplete

In England there has been no recent work published either privately or publicly on either posture or measurements for the general population. Research has been directed towards measuring special populations for particular users, like the armed forces, and developing chairs for special purposes which would fit the largest possible numbers. All the armed forces have series of measurements for men which might, if published, be adequate for the male population as a whole, although rather on the high side. The Institute of Aviation Medicine at Farnborough has developed aircraft seats for aircrew and military passengers. Problems have been overcome concerning footrests for very low seats and back supports and headrests for passengers who may spend many hours sitting down, and the solutions are suggestive for manufacturers of more usual types of seat.

A Medical Research Council Unit on Working Efficiency, under Dr H. D. Darcus, working at the Department of Human Anatomy, Oxford, has carried on work begun by the Admiralty during the war.† The research led to the development with the Fairey Marine Company of a universal naval seat which, with different legs or pedestals, could be used for most jobs. General anatomical and physiological principles were first laid down, on much the same lines as those subsequently explained by Åkerblom, and were then applied. The seat had to fit at least 90 per cent of the sailors who would be using it; the sitters had to withstand fatigue for several hours, so that good support, absence of pressure in the wrong places and allowance for ready changes of position were essential. The position of the seat had to be precisely related to each person and to the footrest, so that the legs were held in the right position, while the eyes could use fixed sighting apparatus. An American series of measurements of forces personnel was mainly used and the seat was given extensive trials during development. Several designs of footrest were made allowing for different angles at the knee for different jobs. All were made to support fully the largest

* 1951. Obtainable from Dr H. D. Darcus, Department of Human Anatomy, Oxford University.

† SEATING IN RELATION TO ANATOMICAL AND PHYSIOLOGICAL PRINCIPLES, H. D. Darcus, RNP46/326 GS98, which can be borrowed from the Admiralty.



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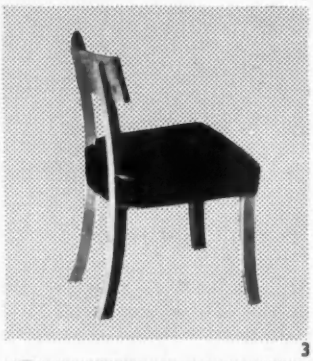

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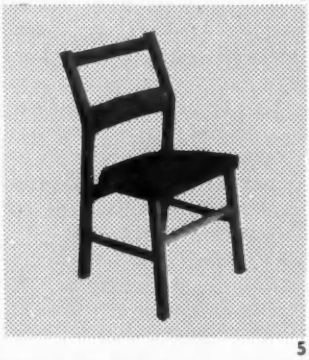

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and 2 *Seats by Fairey Marine td, based on research for a uni-ersal naval chair. The seat, back nd arms can be mounted on a ariety of legs or pedestals. In the Coxswain Type', 1, the sitter in maintain his position in a ough sea by the thrust between ie footrest and the backrest. 2 is general purpose seat made 18 ches high when compressed, to fit ot the sitter but existing tables.*

Dining-room chair 15½ inches igh made for the Shakespeare Memorial Theatre, Stratford-on-Avon, by Gordon Russell Ltd, bout 1930, and still in use today.

A dining-chair 17 inches high esigned by David Fowler for D. Meredew Ltd, and in current roduction. A step in the right irection.

Chair designed for secondary chools using one size of chair only, y David Medd and Oliver Cox, nd made by George Hammer & o Ltd. Children find it very com-rtable, although the seat is too igh, 17½ inches.

Table showing the heights in shoes of the adult population of Great Britain, based on a survey made in 1943 by the Ministry of Food, covering about 25,000 men and 30,000 women. Figures kindly provided by W. F. F. Kemsley, now of the Government Social Survey.

TABLE II

ft. in.	MEN %	WOMEN %	MEN AND WOMEN TOGETHER %
below 4 10	–	1	1
4 10	–	2	1
4 11	–	5	2
5 0	1	8	5
5 1	1	12	6
5 2	3	15	9
5 3	5	16	11
5 4	8	15	11
5 5	12	11	11
5 6	14	8	11
5 7	15	4	10
5 8	13	2	8
5 9	11	1	6
5 10	8	–	4
5 11	5	–	2
6 0	2	–	1
6 1	1	–	1
6 2 and above	1	–	–
	100	100	100

boots, and to maintain the ankle at right angles to the leg. The height of the seat and the distance of the footrests were adjustable. The Unit has since given advice to other users based on its work on this chair, which has been developed by the makers for telephonists, crane drivers, engine drivers and others. For women it is made slightly shallower. Telephonists use it with an adjustable flat footrest attached to the switchboard, an adjustment through 6 inches being sufficient for men and women operators with heights between 5 ft and 6 ft 1 inch.

School furniture sizes

The Anthropometric Section at the Department of Human Anatomy, Birmingham University, has begun a survey of measurements of adults and has already carried out a survey of measurements of children in Birmingham schools. The section is able to advise on the interrelated dimensions of chairs of different sizes and also the proportions of chairs of different sizes required in classrooms for children of each age group.* The British Standard for school chairs is based as to heights on this survey but includes in addition an 18-inch chair, which is unsuitable for any school.† Unfortunately no table showing the heights required for each age group is included in the present British Standard and there is no other easily available publication in which this information appears. It is understood that when the Standard is revised this will be remedied. Some education authorities are known to have bought a selection of chairs beginning with 18 inches for the top forms and working downwards, so that all the children are sitting on chairs which are too high. Clear information is not available about the best type of chair for schools where children are constantly going from room to room, and for comprehensive schools and grammar schools.

Work to be done

This brief survey has touched superficially on most of the recent researches. It shows the difficulty facing those concerned with furniture design today. Enough work has been done, and enough publicity given to it, to throw doubt on traditional dimensions, but the information is either from foreign sources, is in duplicated reports in the possession of various private, generally service organisations, is insufficiently publicised, difficult to co-ordinate, incomplete and, sometimes, inconsistent. The lucky manufacturer or buyer may obtain the advice of one of the very small number of anatomists at present working in this field and may greatly improve his seating. Others may find nothing to hand in sufficiently convincing form and ignore the matter or may try to do the work themselves. One finds members of the architects' departments of educational

* Birmingham Anatomy School, Papers 1–3.
† BS/MOE 11–22: 1950.

authorities carrying on postural research among school children and there are technical departments in firms, staffed exclusively by engineers, doing the same among car drivers, typists and the general purchasers of armchairs.

The vital connection between the dimensions of tables, assembly benches, telephone switchboards, control panels and the like and the dimensions of seats makes a piecemeal advance, even by forward-looking seating designers, very difficult. To secure an advance on the whole front plain authoritative information must be easily obtainable. What is required is, firstly, postural research by anatomists and physiologists to check existing findings and fill in the gaps; secondly, a properly planned sample measurements survey for the population of the British Isles, carried out with the needs of furniture designers specially in mind; thirdly, the interpretation and publication of such researches for the layman and for the designers of different types of seating and related furniture, and fourthly advice on carrying out effective trials.

Related researches

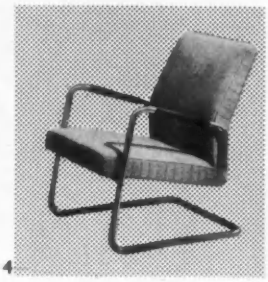
Other industries are already pointing the road. The Boot, Shoe and Allied Trades Research Association has carried out a survey of women's feet, covering a sample of all ages and from various sections of the public, of about 3,000 women, taking 26 foot measurements and height and weight. This survey may occupy the equivalent of about five people for a year, but will be spread over a longer period part time. The Joint Clothing Council has taken over the sample survey of women's body measurements started by the Clothing Development Council and will publish it when complete. Indications are that the trade is anxiously awaiting it, in order at last to have a firm basis for garment-sizing policy. The Furniture Development Council is already engaged on constructional research and the publication of results in easily understood form, but has not yet entered the anatomical field.

This lack of collective action means that little encouragement is given to the Medical Research Council and the universities to widen, to speed up and to publish their researches. Work related to seating is now constantly interrupted by the demands of rival users of anatomical research who can offer persistent encouragement and publish and make use of the findings. Any similar display of interest by the furniture trade would be likely to increase both the numbers of anatomists at work and the amount of time devoted to its problems.

If, as can hardly fail to happen, the results of research point to new standards for heights and sizes, it will be for the designer to create the forms which will make it easier for the public to change its habitual view of what is proper. Once people have been persuaded that their present furniture is not the most comfortable they could acquire, a pleasant vista should open up, not only for the makers of handsaws.

GERMAN CHAIRS

There are already five firms in Germany now producing chairs on Åkerblom principles, many of them designed by German designers. No matter what the type of chair, they all have high backs with lumbar support, and slightly sloping seats. Dining-chair seats are lower than usual; armchair seats are higher and shallower.



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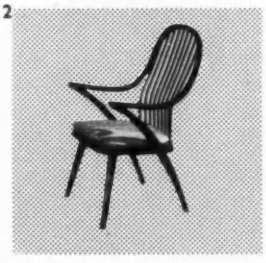

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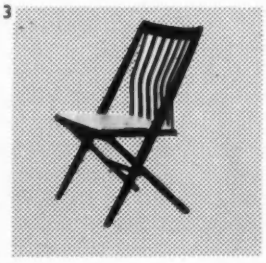

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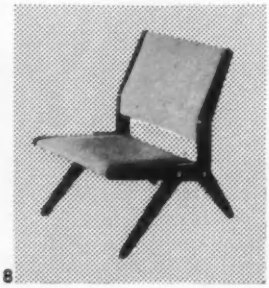


8

1 Designed by P. F. Schneider for Bremshey GmbH für Stahlrohrmöbel, Solingen-Ohligs. 2 Made by Wilhelm Benze GmbH, Hannover. 3 Made by Walter Krenzer GmbH, Dilkreis. 4 Designed by Albrecht Lange and Hans Mitzlaff for Bremshey GmbH für Stahlrohrmöbel. 5 Made by Bremshey GmbH für Stahlrohrmöbel. 6 Designed by Albrecht Lange and Hans Mitzlaff for Polstermöbelfabrik Eugen Schmidt, Darmstadt. 7 Designed by P. F. Schneider for Bremshey GmbH für Stahlrohrmöbel. 8 Made by Polstermöbelfabrik Eugen Schmidt.

FUSEGEAR

for the modern interior

Michael Farr

THE FUSEGEAR DEPARTMENT of the English Electric Co Ltd is a self-contained unit with design, production and sales facilities of its own. For 25 years the department has made fusegear of all types for stock and special-purpose jobs. In the late 'twenties it was responsible for pioneering the use of heavy industrial fusegear of the type which has a high rupturing capacity. Recently there has been a noticeable change in its design policy so that the emphasis is now placed on better-looking equipment. Under the leadership of its manager, H. Simmonds, a team of engineers, workshop and laboratory staff has brought out a new range of fusegear with a new title, SUPERFORM, in which the main features are better appearance and greater safety. Mr Simmonds' periods of travel in the U S A and Canada were partly responsible for adopting a fresh approach to this aspect of design. It became evident that a new market could be explored, a market which makes a direct appeal to architects, especially those concerned with hotels, hospitals, power stations, schools, as well as factories.

The same point is emphasised by the new fusegear catalogue brought out for the SUPERFORM range: "In the past architects' problems have been increased due to the outward appearance of various existing electrical distribution equipment. . . . Cast ironclad gear, often having a poor finish and with many projecting ledges, has been responsible for collecting dust and dirt and is out of keeping with modern design and finish in buildings. . . . The English Electric Co . . . is confident that the new SUPERFORM range will produce an answer to these problems. The equipment can be installed in prominent positions without detracting from the appearance of the building." At the recent 'Electrical Engineers Exhibition' a SUPERFORM switchboard won for the company a silver plaque for originality in design, construction and ease of operation.

These developments are the natural outcome of the increasing use of electricity in industry and in buildings of every kind. Electricity has advanced beyond the stage when it could be considered a mere accessory to industry. It now fulfils a major rôle and is a vital service. The design of fusegear, on which the distribution of electricity depends, is the main factor in the effectiveness and reliability of such a service.

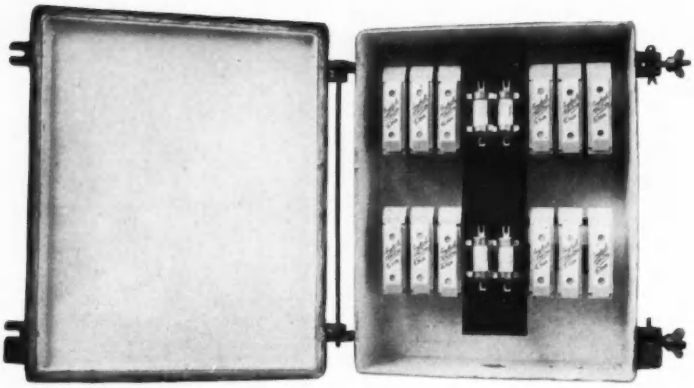
SUPERFORM equipment is therefore essentially functional. Improvements in appearance are coincidental with improvements in technical performance. The increasing use of electricity involving the control of larger values of power has imposed new problems which call for the highest standards in every aspect of fusegear design. It is the duty of fusegear to protect as well as control the electrical circuit and it is when the circuit is faulty that the severest test of the equipment occurs.

The layout and appearance of the distribution fuseboards themselves are therefore of great importance. For safety the controlling switches and protective devices should be identified easily with the circuits they control. Factory conditions are constantly being improved to attract the right type of labour and it is evident that, in equipment such as fusegear, both the shape and finish of the installation and its siting can contribute to the appearance of a workshop.

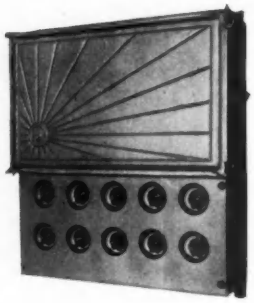
The new SUPERFORM equipment is illustrated on these pages alongside older models so that the revolutionary changes in design for construction and layout can be seen. Some of this older ironclad equipment in all sizes of boards is still in current production and, for the reason that tool costs have now been recovered,

LEFT *A typical situation for the 'flush-mounted' type of* SUPERFORM *boards with isolators. The casings recede into the wall to the depth of one brick. The main steel case of each board can be fitted in the wall at an early stage. When plastering and painting are completed the assembly of fuses together with the backplate to overlap the wall surface can be inserted, and the door hung in position. There is a spring-loaded press-button catch and the lock is optional.*

DISTRIBUTION FUSEBOARDS



1928 *The first English Electric fuseboard. Both case and cover are cast iron, with projecting hinges and wing-nut fasteners. The fuses have porcelain handles and bases.*
VARIETY: *30 amp, double pole (out of production).*

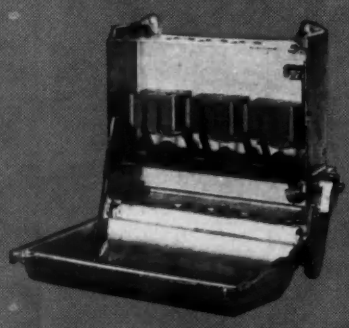


1938 *Fuseboard with individual switches mounted on a sheet steel panel. Although banal the 'rising sun' decoration gave a better surface finish by obliterating small casting blemishes.*
VARIETY: *SS, 15 amp, 250 volt.*

is lower in price than the SUPERFORM boards. But, apart from developing a new market for itself on account of its better appearance, the SUPERFORM boards are reported by the company to be gaining ground on the older types. This is particularly true of the larger units where the cost of introducing the new features can be spread more evenly. The change in exterior designs provided an opportunity for several important technical advances to be made concerning the functioning of the equipment.

The appeal which the SUPERFORM boards make to architects and non-technical executives in commercial companies – as well as to many electrical engineers – is likely to be decisive when competing with older types of equipment. In fact, for all types of public buildings and the lighter industrial factories, the boards can be placed in the most convenient positions for service and maintenance without spoiling the interior design scheme. The older and uglier equipment frequently had to be installed out of sight, which meant in many cases that the main channel or conduit had to be deflected from its normal path in the building. Realising this the English Electric Fusegear Department has made a bold attempt to present its equipment in such a form that this extra cost and inconvenience become unnecessary.

ISOLATORS



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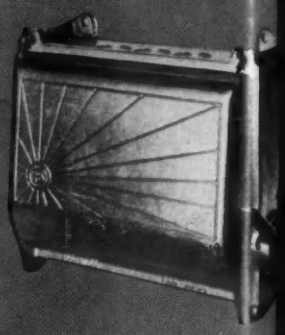


2

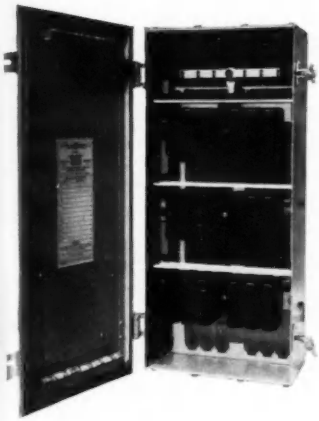
1 and 2 1938 *'Ironclad' type isolator with air-break mechanism. An external operating handle allows the cover to be opened only when the switch is in the 'OFF' position. In the bottom of the case there are three 'knock-outs' for inserting cables.*
VARIETY: *LP, 100 amp, triple pole & neutral.*

FUSESWITCHES

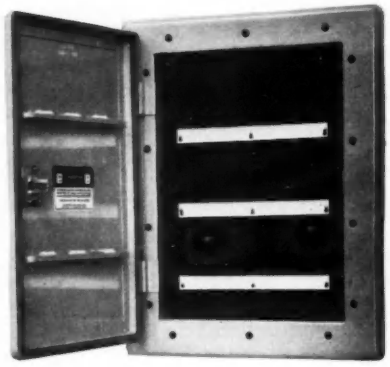
6

6 1932 *'Ironclad' type combination fuse-switch unit. There is an external operating handle which prevents the cover from being opened before the current is switched off.*
VARIETY: *60 amp, 660 volts.*

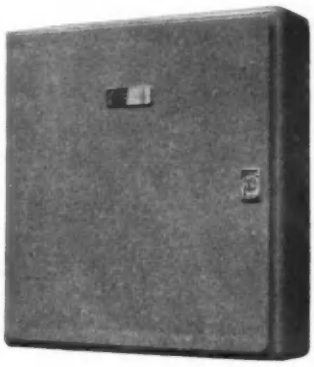
7 1953 SUPERFORM *air-break fuseswitch unit, in sheet steel case with stove enamel finish.*
VARIETY: *300 amp, triple pole.*



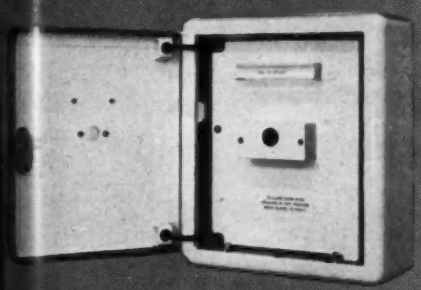
1943 *The construction of this fuseboard is entirely of sheet steel. The cover, with trays for spare fuses, is retained by heavy projecting hinges.*
VARIETY: *SM, 6-way, 60 amp, triple pole and neutral.*



1953 *A 'flush mounted'* SUPERFORM *board, recessed into the wall to the depth of one brick. Sheet steel construction is used and the cover carries a spring-loaded catch. The interior is fully shrouded: identification labels are under each bank of fuses.*
VARIETY: *SPM, 15 amp, triple pole and neutral.*



1953 *A 'surface mounted'* SUPERFORM *board, which is similar in construction and layout to the 'flush mounted' type. Two further examples can be seen on page 27.*
VARIETY: *SPM, 30 amp, triple pole and neutral.*



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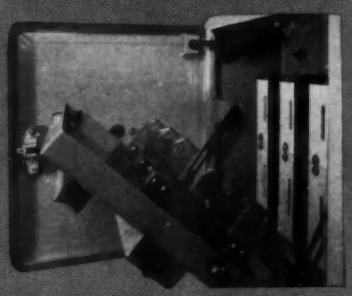
1953 SUPERFORM *isolator. As distinct from the earlier LP type, this model has been designed for use in conjunction with the new distribution fuseboards as an 'off load' isolator for maintenance purposes. An essential feature is the lock which, when the isolator is switched off, prevents unauthorised persons from operating the power supply.*



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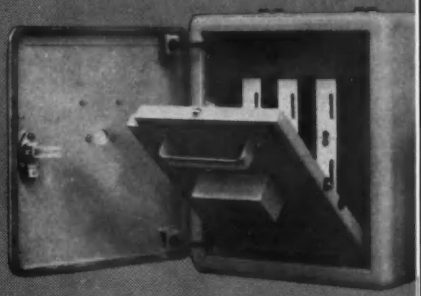
4 and 5 *When the internal flap cover is pulled outwards the copper blades can be displaced by a cam, which renders the isolator safe in the 'OFF' position. The cover can then be closed and the door locked, with the position of the isolator indicated in the viewing window. The door, with concealed hinges for the sake of appearance, is sprung so that it must either be fully open or fully closed. On page 27 the isolator can be seen with the door closed.*



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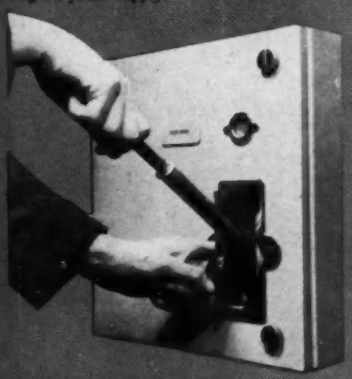
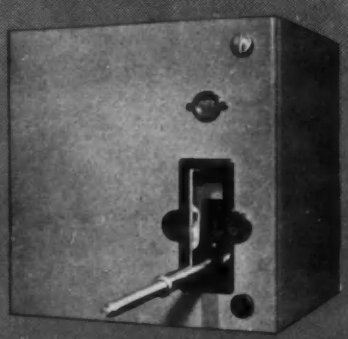


8

9 and 10 *The fuseswitch is operated by a telescopic handle, which is reached by pressing the spring-loaded flap. The flap can be locked when the switch is in the 'ON' or 'OFF' position. Also, when the circuit is 'alive', an automatic interlocking mechanism secures the hinged door and prevents inadvertent access to 'live' metal. The position of the switch is indicated in the window above the flap. The design of the flap and the window could be improved.*



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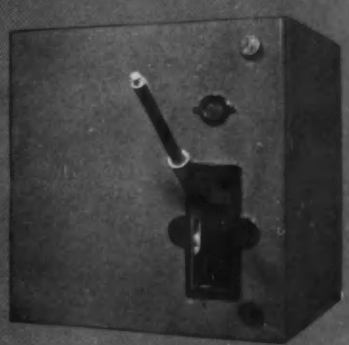
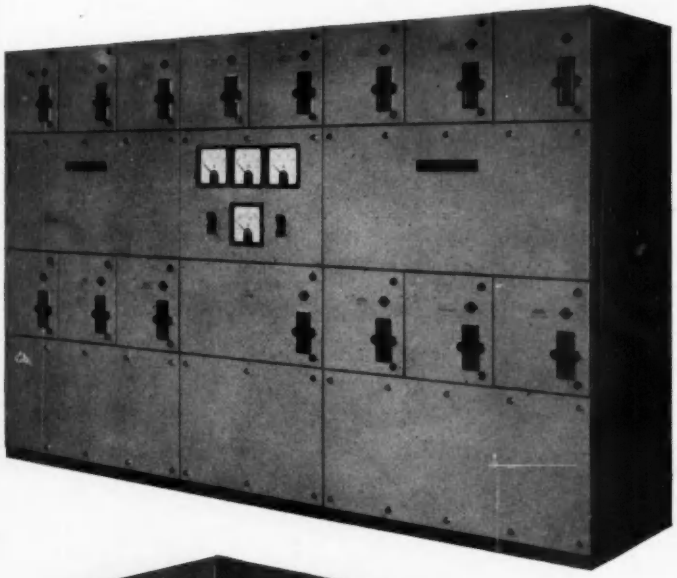


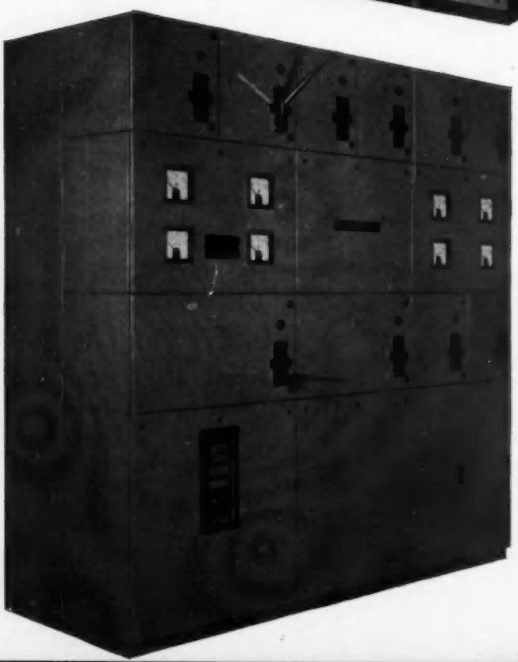
10

FUSESWITCH BOARDS

1 *Combination fuseswitch boards can be made up to the customer's specification, and are still in current production. They are sold chiefly to the heavier industries. A central busbar chamber allows great flexibility in current control so that a reasonable number of extra circuits can be incorporated after the board is installed. Such modifications must be added as appendages to the basic frame. Each unit is independent and can be shut off from the power without affecting others on the board.*

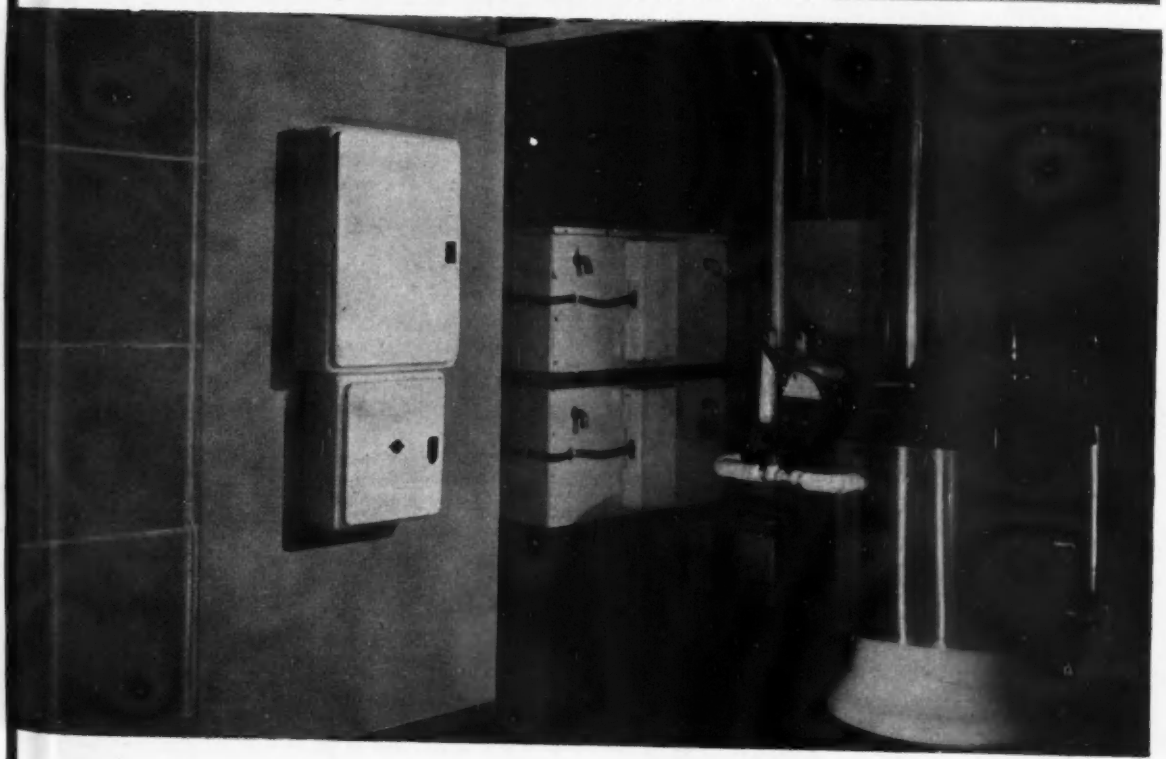


2 *This* SUPERFORM *board, of similar capacity, was designed to meet what the company claims to be a steadily increasing demand for better-looking equipment. It is more expensive than the earlier 'ironclad' design, but has gained in popularity, especially in the lighter industries. Compact, neatly housed equipment combined with easily cleaned surfaces makes the new cubicle boards especially appropriate for flour mills, textile factories, etc, where the atmosphere is laden with dust. These boards must in general stand away from the wall to allow for cabling and servicing, although arrangements of similar equipment are available in which rear access is not required. The technical performance of the cubicle boards represents an improvement on the 'ironclad' type, and boards are now installed with sufficient provision for extra circuits to be included when needed. A current vogue in the industry for square instrument dials has persuaded the Fusegear Department to adopt the type shown here. As the calibration occupies only a small segment of a circle, it is questionable which type of dial opening, square or circular, is the more appropriate.*



3 *At the recent 'Electrical Engineers Exhibition' at Earls Court, the silver plaque for originality, design and construction, workmanship, ease of operation and maintenance, was awarded to the English Electric Co for this* SUPERFORM *fuseswitch board.*

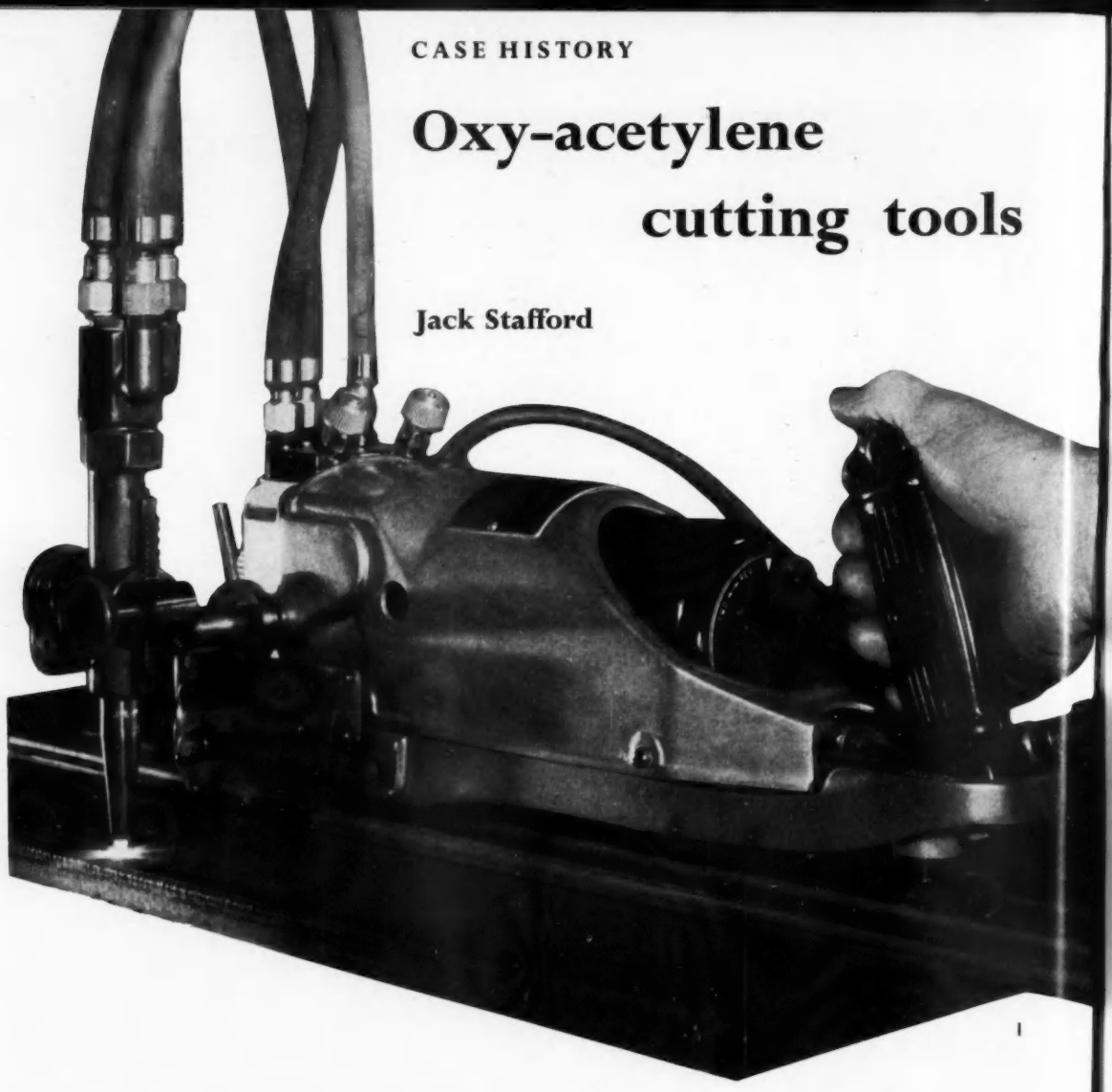
RIGHT *Two suitable positions for mounting 'surface' type* SUPERFORM *distribution boards. The development and design of the* SUPERFORM *boards were retarded by the heavy demand for existing equipment during the war, followed by a seller's market. Development of the new boards started in* 1952 *with the intention of anticipating a world-wide trend towards well-designed standard equipment that could be mounted anywhere with no need for concealment. The boards are of steel with a rust-proof finish that is afterwards stove enamelled in several colours. Architects, company executives, and others may well be expected to prefer these boards to the earlier 'ironclad' types shown on page* 24.



CASE HISTORY

Oxy-acetylene cutting tools

Jack Stafford



1

THE EXTRACTION of various gases from the atmosphere and their supply to users in industry is the concern of The British Oxygen Co Ltd. Complementary to this is the development of equipment which will use these gases. None of the equipment is bought by the public – the main buyers are in the engineering industries and the medical professions – so that in the past its appearance has not been the first consideration. Nevertheless, the design of the latest product, the 'Bantam' cutting machine, has been very carefully considered, and most of the company's more recent products show an increasing awareness in this field.

One of the main reasons behind this is to try to decrease the amount of abuse to which the equipment is subjected by actual users. To take an outstanding example, cutting metal either for scrap or prior to production is not regarded as highly skilled work, and consequently the type of labour employed tends to take a rough-and-ready attitude towards its tools. This has led to oxy-acetylene cutting torches being used as hammers in cases where complete cuts had not been achieved. Subsequently this misuse was largely avoided by making modifications to the appearance, including chromium plating, which expressed the torch as a precision instrument that the user could take some pride in handling.

Solving these sorts of problems, as well as the normal design and development work, is the province of the

design department. The company stresses teamwork as the spirit of the department, and the engineers and draughtsmen working as designers responsible for a project always handle both the functional and appearance design. At the beginning of a project the superintendent in charge of design often asks several of his own designers, who may afterwards work in conjunction, to tackle a problem quite independently in the first stages, so that it may be seen from several viewpoints before one particular approach is settled. The department works closely with the equipment committee which decides on the development of new products, gives a production price range or a ceiling price, approves designs at various stages, allots a budget for the development of a certain number of prototypes, and eventually passes a design for production.

Interrelated parts

The 'Bantam' was developed as the lightest model in a range of gas cutters, being definitely intended as a portable machine, although it was to have a wide range of applications. The major dimensions were set by the motor, a proprietary unit with a wide range of speed, continuously variable by a setting on the motor, and reversible. The machine is supplied with a three-foot length of track for straight-line cutting, and also a radius bar for cutting circles from 3 inches to 45 inches in diameter. In addition it may be hand-guided, and the set of the handle was designed to give the feel and ease of handling similar to a large jack plane. The chassis is of cast aluminium, to carry the motor, reduction gear box, and driving wheels, and also protect the feed pipes from the hose connections near the handle. The main oxygen cutting control is mounted at the end of the handle, and the motor controls are accessible without loosing the grip on the handle. The other gas controls are mounted near the various mechanical adjustments which position the cutter head and also enable bevel cuts to be made. A guard of copper-faced asbestos protects the unit from the intense heat. Two further castings are used, both detachable from the main chassis. One shrouds the

1 *The new 'Bantam' machine, in use for straight-line cutting. The accessibility of the motor controls can be seen: the cutting oxygen control is directly under the operator's thumb.*

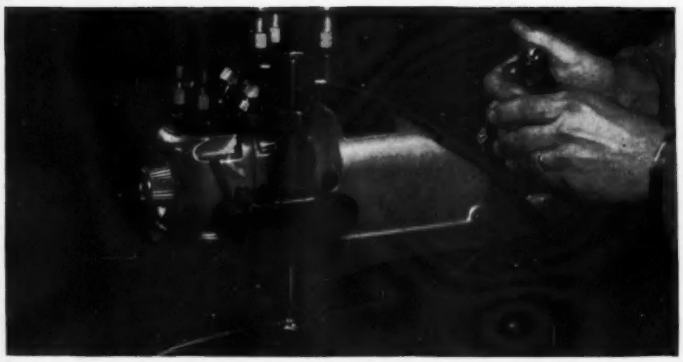
2 *The 'Bantam' in use for free profile cutting, being actually guided by the operator. The control knobs, of aluminium, are simple and effective.*

3 *Straight-line bevel cutting, using the three-foot length of aluminium track. The moulded plastic handle, with cutting control on top, can be clearly seen.*

4 *An early prototype of the 'Bantam'.*

5 *An earlier cutting machine, still in current use. The 'Bantam' is the lightest in duty of this range, and is also adaptable for more operations.*

2



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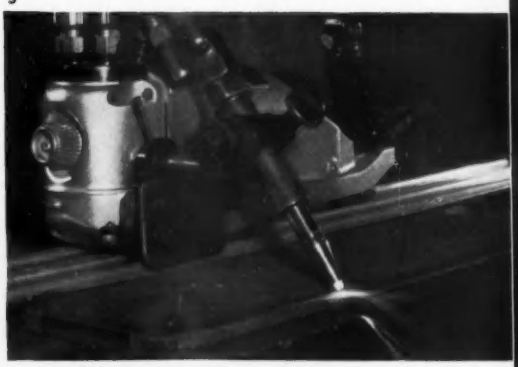

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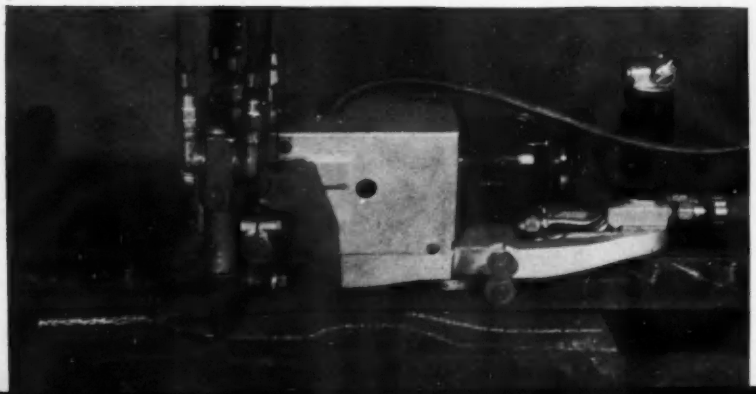

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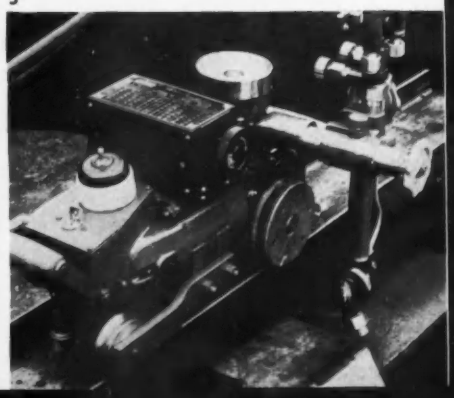

A gas cutting blowpipe, redesigned to prevent misuse by the operative. The main cutting control is directly below the grip. The head is shaped so that it can be gripped in a vice for removal of the nozzle.

6

7

6 *The spot welding torch in a modified design so that manual pressure can be applied. In this model, the water-cooled shield is in use.*

7 *The 'Argonarc'. A heavy-duty arc welding torch, made almost entirely of* TUFNOL. *The hood round the electrode is ceramic, and the cable and torch are watercooled. Argon gas shrouds the welding process, so that the main cable to the torch carries the water flow and return, the argon supply and the current for welding.*

8

8 *The 'Devanaest'. The chromium decoration is completely unnecessary, and must add considerably to the cost; the shape of the dial and its scales are unrelated to their radial functioning.*

9 *'Boyle Model G' apparatus.*

10 *The 'Centanaest', a redesign of the 'Boyle Model G', which has been improved in ease of operation, cleaning, safety, and protection from accidental damage.*

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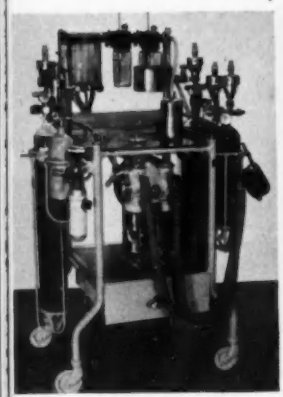

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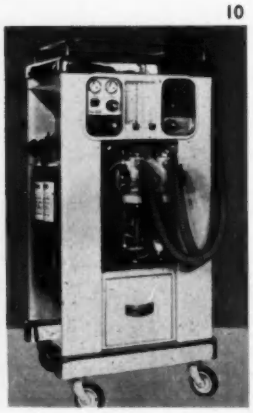


reduction drive, and also carries the traverse adjustments and gas controls. The other protects the motor unit, and allows air inlets for cooling the motor, whilst it slightly overlaps the chassis to facilitate cleaning. This latter casting is the most important in determining the appearance of the machine, although it is the way in which the three castings are interrelated which gives the whole unit such an integrated form.

False styling

Another tool of well-integrated and pleasing form is the spot welding torch. This is an adaptation of an 'Argonarc' torch so that manual pressure can be applied by the operator. Apart from the standard plastic handle, the whole unit is made from TUFNOL, a resin-bonded linen material of great strength and possessing good insulating qualities, which is machined like metal; the torch is almost completely made from turned components.

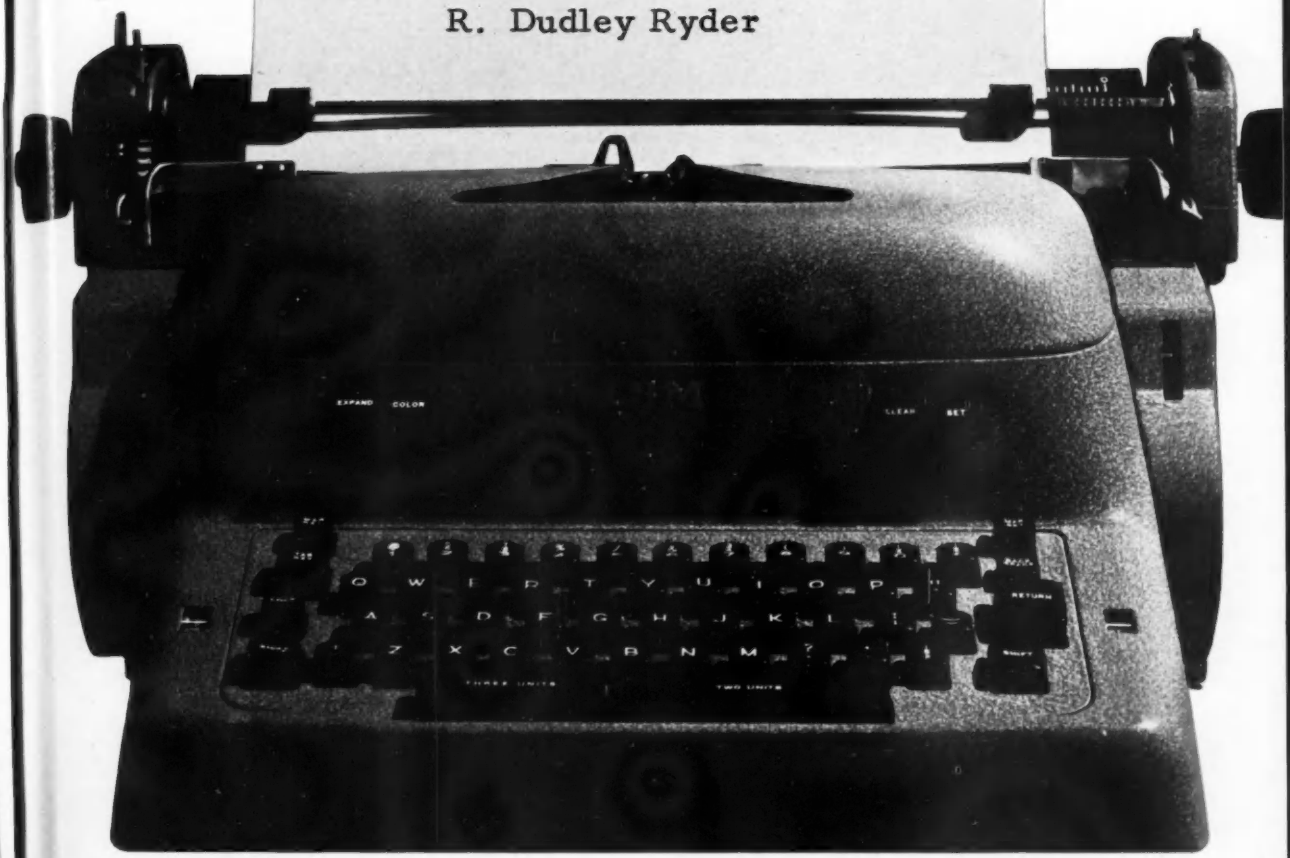
As well as being the technical success which may be expected of a company of this calibre, both these designs express their function in an aesthetically pleasing way. With many engineering firms, the good aesthetic design of their equipment seems to be derived from a close relationship with functional requirements. The vitality and assurance of an engineering problem solved, and the severe limitations to appearance design which are thereby imposed, can provide the essential inspiration to produce a design of good appearance. Where these limitations are lacking the scope for appearance design may sometimes be too great and the results unhappy. This trend can be seen in the medical equipment made by British Oxygen, some of which is completely encased and basically simple in form. Simplicity, one of the goals of technical design, is paradoxically to be feared in appearance design; unnecessary additions which would not even be contemplated on the inside become 'design' on the outside. The 'Devanaest' appears like a wireless set from the 'thirties, with its three chromium styling strips wound round it, and one of its radial scales tortured into a straight line with a kink in it. Compare this with the 'Centanaest', a redesigned version of an earlier piece of equipment, where a delicate and complex apparatus has been partially enclosed and fitted with a finely designed control panel. Its purpose is a plain one; the designers would surely not suffer its mechanism to be interfered with by 'three turns and a kink'. The complete honesty of this whole design contrasts very strongly with the false styling of the other; an honesty which comes through its expression of purpose.

TYPEWRITERS

OFFICE EQUIPMENT

Part three

R. Dudley Ryder



Compared with the two articles already published in the series on office equipment (DESIGN *March and May*) *this one is more compact for it deals exclusively with one type of equipment. All offices have typewriters: many people possess their own portables. This certainty of reaching a wide and critical public, aware of modern design standards in other fields and on the look-out for new trends, has prompted manufacturers of typewriters frequently to introduce improved designs. Together with this better presentation of equipment there have been important technical developments. These include electric carriage control, proportional spacing of letters to enable the right-hand margin to be kept even and a noiseless portable.*

1

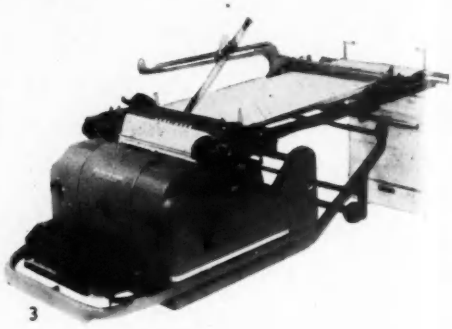
OFFICE ELECTRIC

1 UNDERWOOD all-electric machine. A well-designed electric typewriter finished in grey. The new 'finger-flight' keys have been scientifically contoured so that they respond to the slightest touch of the fingertips. The functional keys are differently coloured for ease of identification and are located in the keyboard zone to minimise finger reach. Underwood Business Machines Ltd.

3 This continuous form all-electric typewriter has been designed to eliminate every non-productive operation in the preparation of forms that require one or more copies – invoices, orders, requisitions and the many other multi-copy records used in modern business. Underwood Business Machines Ltd.

2

2 The IBM electric executive typewriter is a fine-looking machine finished in grey. Unlike other typewriters, each letter is cast on a body to its own width; letterspacing can be automatically applied. A choice of two IBM typefaces is available, modern and documentary. The former compares approximately to printers' 11 point and the latter to 10 point type. IBM United Kingdom Ltd.



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STANDARD OFFICE

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6 Introduced for the first time this year is the 'Byron 54'. Three different lengths of carriage are interchangeable on the one base. All controls are on the keyboard, including separate stop clearance, while the tabulator mechanism is mounted on the carriage. Byron Business Machines.

7 The clean lines of the new Olivetti 'Lexikon 80' typewriter are very striking. This fine machine embodies automatic margins and tabulation, touch tuning, ribbon re-

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LIGHT OFFICE

4 There has often been a demand for a typewriter rather larger than a portable but smaller than a standard machine. The new REMINGTON 'Office-riter' has been designed to meet the needs of the small business and professional office. It is fitted with a full 11-inch carriage with a 10·3-inch writing line. The main features of this new and well-finished machine include direct-set visible margins, to make it possible for the typist to see where to set for right- or left-hand margins without moving the carriage. Remington Rand Ltd.

5 Another light office machine is the 'Hermes 2000'. It embodies such devices as automatic margins, keyset tabulator, and adjustable touch control. All settings and adjustments are easily made from the front of the machine, and it is quiet and light in operation. The 'Hermes 2000' is made in Switzerland and sold in this country through British Typewriters Ltd.

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verse, including accelerated type-bar action which gives additional clarity and speed. The carriage runs on steel bearings which ensure that good alignment is maintained. British Olivetti Ltd.

8 The new REMINGTON noiseless typewriter is made only in Britain at the firm's factory in Scotland. The machine has unusual manifolding possibilities; it will give up to 20 carbon copies. With all its virtues it is a pity that more thought has not been given to the design of the top casing. Remington Rand Ltd.

9 'Super-riter' is the name given to the latest REMINGTON standard office machine. The appearance of this machine is an improvement on that of the noiseless typewriter. By removing eight screws the casing may be taken away and the machine itself folded open to give access to all vital parts for mechanical adjustment and cleaning. Remington Rand Ltd.

10 An all-British typewriter is the 'Imperial 65'. The type unit, carriage and platen are all interchangeable. Carriages are available in five different lengths and platen rollers may be changed as required. The straightforward functional-looking casing is spoilt by the chromium styling. The Imperial Typewriter Co Ltd.

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PORTABLE

1 The 'Lettera' is a very compact portable machine belonging to the tradition of good design associated with Olivetti. It has many of the advantages of a standard machine. It weighs less than 10 lbs and fits into an airline carrying-case of very pleasant design. British Olivetti Ltd.

2 The Imperial 'Good Companion' portable typewriter is a simple unpretentious design finished in grey enamel. The ribbon spools are enclosed, and the tabulator stops may be set by moving the lever on the right of the keyboard. The release clutch for variable line spacing incorporates a press-button device to allow for fractional line spacing. The Imperial Typewriter Co Ltd.

3 The 'Empire Aristocrat' is another compact little portable machine weighing only 8¾ lbs and standing no higher than an ordinary box of matches. In fact it is so small that it can be put away in a shallow drawer when not in use or slipped into an ordinary brief case for a journey. British Typewriters Ltd.

4 The new Remington noiseless portable typewriter is a neat machine and should prove most useful for typing at home or in flats where the clatter of an ordinary machine is often so distracting. Remington Rand Ltd.

5 New to the range of portable typewriters is the 'Quiet-riter'. It is a very sturdy and compact machine embodying the basic features of the modern office typewriter. The paper cylinder has been increased in size and the paper feed system itself has also been improved. Remington Rand Ltd.

FOREIGN REVIEW

This recurring feature provides a critical assessment of current designs and design activities from overseas.

USA

Design for labour-saving: Part one

CLAUD BUNYARD

THE EXPRESSION 'LABOUR-SAVING' as applied to the home grew in significance after the First World War when domestic service became unattractive in comparison with the higher wages offered by industry. The subsequent growth of the appliance industries in different countries corresponds closely to the prevailing level of wages, however much may have been contributed by other factors. It is therefore not surprising that the American appliance industry should have outstripped all others in the variety and quantity of its output, and occupy such an important place in the national, as well as the average household, economy.

In the same period the status of the kitchen has been raised to a position comparable to other rooms in the home. The family frequently takes its meals there, and in many modern houses it opens frankly into other rooms and is no longer shut off from visitors. It has therefore become an integral part of the general furnishing and décor of the home, and as such, the housewife – and husband – expect it to be a pleasure to themselves and attractive to their friends. The aesthetic function of appliance design has in consequence acquired a special significance. The stove, sink, refrigerator, washing-machine, food-mixer, toaster, and all sorts of other devices are permanently on view and are required to be beautiful as well as efficient.

Competitive markets

The variety of appliances, both in kind and make, offered to the American housewife is fabulous. There are at present, for instance, at least 100 makes of refrigerator on the market; one firm is, this year, offering 20 new models, as in fact it did last year and will probably do next. And there are special appliances for almost every housekeeping activity. In spite of armament production, the American domestic equipment industry seems more than capable of meeting the demand. Competition and therefore sales propaganda is intense, and it is not surprising that its aggressiveness should be reflected in the appearance of the appliances themselves. It is not enough, apparently, that X Incorporated's appliance should perform better than the rest and look well in its domestic surroundings; it must stand out when lined up with rows of other makes in the retail showroom. In some cases the visual demand for attention seems to amount almost to hysteria, and it is only to be expected that many otherwise efficient machines are ruined in appearance by the addition of eye-catching detail which has no relation to performance.

Complex controls

Related to this tendency is the ever-increasing complexity of controls, especially on electric cookers. A single hotplate, for instance, instead of being controlled by one turn switch clearly graded for different temperatures, has anything up to seven push-buttons. Multiply this by four and you have 28 buttons. Add to these the oven and broiler controls, and automatic timing devices, and you have a scene which has been likened to the cockpit of an aeroplane. The question is, do all these complications really save labour and increase efficiency, or does the American housewife just like them for the heck of it? That there are a few good solutions to the design of control devices, mainly in the field of small appliances, suggests that American women do appreciate imaginative simplicity when it is offered to them. But in cookers particularly there seems to have been a minimum of serious study given to this problem. But these criticisms must not be allowed to detract from the immense achievement of the American appliance industry in easing the burdens of the housewife and raising the standards of life in every American home. The distribution of useful appliances amongst those with comparatively low incomes is phenomenal by British standards. There is scarcely an American without the service of a refrigerator, and the average home is equipped to an extent equalled in Britain only among those earning high incomes. It is difficult to dissociate the generally high rate of American productivity from the incentives offered by the possibility of acquiring such appliances.

Refrigerators and freezers

The pattern of American labour-saving begins appropriately with shopping, for it is in this time and effort consuming operation that the English housewife would probably most envy her American cousin. The key is refrigeration. Instead of making two or three trips a week, the American housewife goes to a single store – the 'supermarket' – usually by car and often in the evening with her husband, and buys everything for the week. Home with her load, everything perishable goes into the refrigerator which, by British standards, seems enormous.

American kitchens, however, are no bigger than British, and this has led the industry to concentrate on maximum capacity in relation to outside volume. Through improved insulation, refrigerator wall-thicknesses have been reduced considerably

while the 'works' have also been reduced in volume. Improvements in shelf arrangements are continually being made and many models now have sliding cantilevered shelves. The latest idea in this field is the revolving shelf, about two-thirds of a circle in shape, and pivoted at the radial centre. The most important innovation, however, is the hollow door fitted with shelves and racks.

The hollowing of doors for extra shelf space is closely related to improved external appearance. The large area of white enamel presented by a refrigerator door is both a challenge and a temptation. The custom in the past was to impress geometric patterned mouldings upon it and thus provide stiffness and visual relief. The new practice of hollowing the door has encouraged the use of simple convex surfaces. The shaping of these, within the limits of engineering requirements and practical convenience inside, offers extensive opportunities for sensitive modelling.

Applied ornament

Related to this is the design of the handle and the maker's signature and trade-mark. That the amount of taste displayed in these details varies greatly is to be expected. Handles seem to present the principal difficulty. Many are highly practical and can be operated by a touch of the elbow, but few are satisfying to the eye, and most suffer from over-elaboration. The idea in many cases seems to be to endow them with the richness of a silver and gilt sword of honour. Handles are a difficult and interesting problem requiring sculptural imagination and skill of a high order.

The deep-freezer is a logical growth of the ordinary refrigerator freezing compartment. Part of its purpose is to enable several months' supply of perishable foods to be bought at seasons when the prices are lowest and at quantity discounts. It is claimed that the savings are such that they go a long way towards paying for the machine during a reasonable instalment period. They are certainly a great convenience, especially for people who grow their own fruit and vegetables. Externally they present the same design problems as refrigerators, with which they are often paired. There are however a number of horizontal models which provide greater flexibility for odd-sized packages. They occupy more floor space, but provide a useful working surface.

1 *Chrome and gilt decoration is more restrained than usual in this* FRIGIDAIRE *refrigerator though the jazzy 'juke-box' styling is clearly present. Maximum use is made of the thick door for storage. Shelves pull out and are on cantilevered slides. Freezing chest at top includes ice trays and dispenser for small juice cans. Interior walls enamelled ice green, metalwork aluminium gold anodized. Exterior vitreous enamelled white, though green or primrose is available at extra cost.*

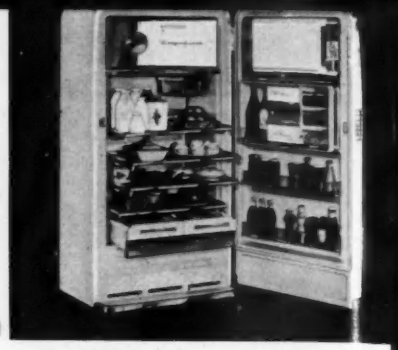
2 SEARS ROEBUCK *refrigerator. An unusual but logical arrangement of storage space with a freezing chest at the bottom and warmer areas progressively towards the top. The arrangement allows more frequently used items to be placed on convenient levels. The power unit is in the rear giving maximum access to the front. Decoration is intended to impress with its smartness, and its associations with space fiction and the wonders of science.*

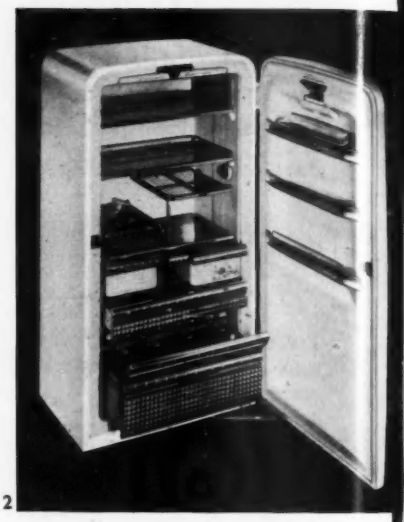
3 GENERAL ELECTRIC *refrigerator and freezer combination. Special features include: revolving shelves; refrigerator plate sloped downwards to give a better air circulation and maintain an even temperature; and a separate freezing compartment.*

4 KELVINATOR *deep-freezer of the horizontal type. Although it takes up more floor area than the vertical type it has the advantage of providing an extra working surface.*

Washing dishes and clothes

American sinks are essentially of the same design as in Britain, though double sinks are probably more common. The writer has seen none in stainless steel. All have been ceramic. Draining areas are sometimes incorporated. More often however, especially where the sink is built into a line of storage units, the





working surface (of linoleum or hard plastic) is carried through to the edge of the sink well, a loose rubber draining-mat – grooved and rimmed – being put in place and removed when the dish-washing is finished. The vertical plate-rack, so common in Britain, seems unknown in the U S A. Instead a plastic-covered wire basket is used about 18 × 15 × 5 inches deep with slots for plates and a 'box' in the corner for silverware. Sink disposal units for fitting to standard sinks are increasingly prominent in the stores.

Automatic dish-washers are in very wide use. Most of the new models are incorporated into sink units, and open in front, the whole interior pulling out like a drawer. Nearly all are fully automatic. Hearsay suggests that the development of a detergent that is harmless to fine glassware and ceramic glazes would be widely appreciated.

The demand for automatic washers and driers has been accelerated by the high cost of commercial laundering. In the better machines a high degree of automatic control has been achieved, and the 'workless wash-day' is a lively feature of the industry's sales propaganda.

Various types of agitator, based on either the impeller or rotating-drum principles, are in use. The relative merits of each are debatable, but the drum has the undoubted extra advantage of providing a ready means of spin-drying to the point where the clothes can be removed drip free. This form of drying dispenses with the laborious job of wringing, which it is rapidly replacing. Powered wringers, moreover, can be dangerous, especially where children are concerned. Automatic control of these successive operations is being achieved in an increasing number of washers.

5 *An unusually compact combination unit for the small kitchen produced by the General Air Conditioning Corporation. The design is clean and functional, lacking the usual styling excesses. It consists of a hotplate with three boilers, twin sinks, an oven and a refrigerator with a deep-freezing compartment.*

6 HOTPOINT *electric dish-washer/sink combination. A single turn of a switch and everything is sprayed, double-washed, double-rinsed and dried.*

7 *'Duomatic' combination washer/drier by Bendix Home Appliances. The complete cycle of operations is controlled by three dials: the washer control, which is set to the required washing time, the clothes being automatically washed, rinsed three times and partially dried; hot-water control, which can be set to 'hot' or 'warm' and also switches off the electric or gas water heater when the washing is complete; and the drier control which sets in action a hot-air blower.*

8 *The* FRIGIDAIRE *electric drier is designed to match a washing machine so that the two can be installed side by side. Any desired drying time can be set on the timer which automatically switches off the machine, and the pilot light, when the job is completed. The machine's comparatively simple function gives less scope for elaborate dials than in, for example, a cooker.*

Drying and ironing

Clothes-drying, which in the past caused the housewife more heartbreaks than any of her chores, is now taken care of in hot-air driers, which are made as companion pieces to most of the better washers. The logical development in washing and drying machines has this year been achieved for the first time by Bendix Home Appliances. This machine also incorporates a water heater (gas *or* electric) and thermostatically controlled, so that the water can be brought up to and maintained at the right temperature. The complete cycle of operations in this machine can be pre-controlled by dials and switches.

Ironing seems to be the one domestic task that can never be delegated entirely to a machine. Even so the powered rotary iron is an important step forward, and is particularly useful for 'yards goods' such as sheets and towels. At the same time the hand iron seems unlikely to become obsolete. The best of the American models are very well designed, both in general appearance and detailing. There are also various makes of steam irons which have many advantages over dry irons though they involve difficult design problems.

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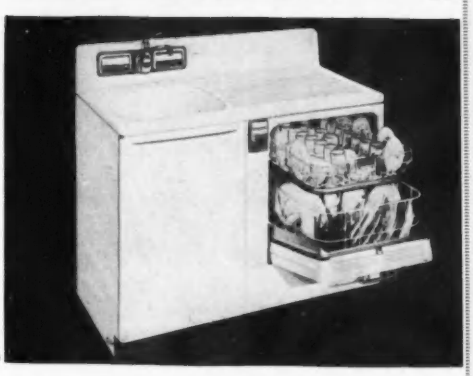

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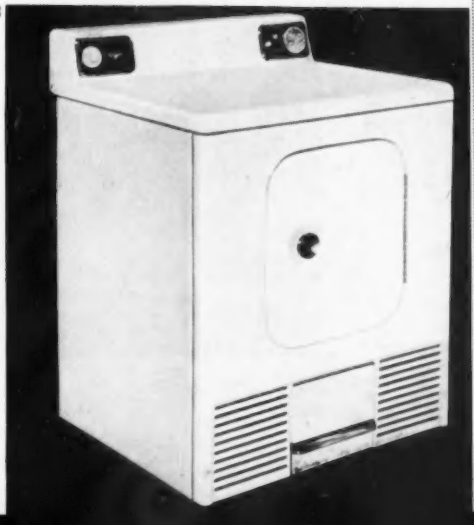

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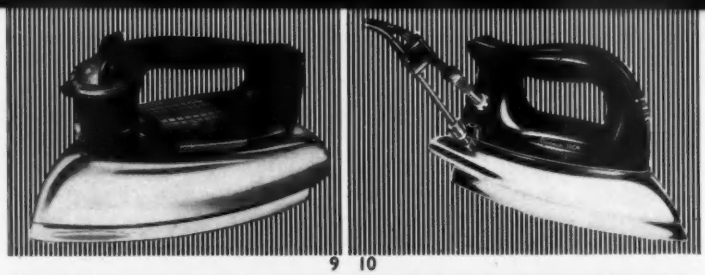

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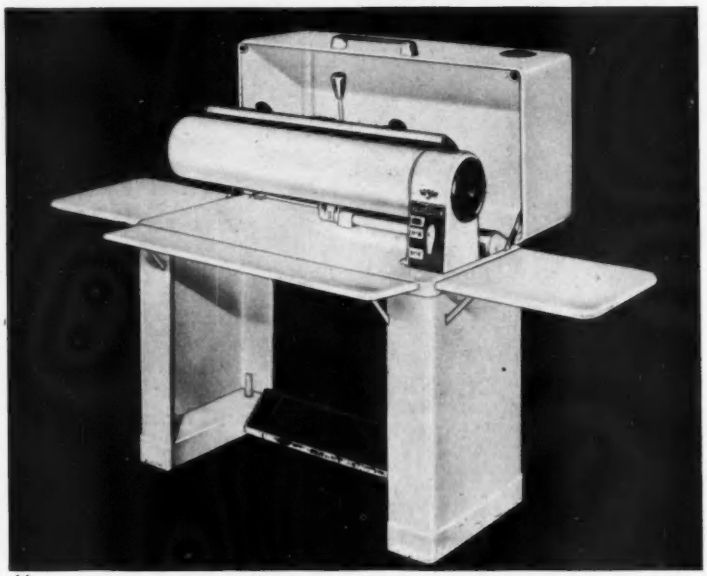
9 GENERAL ELECTRIC *steam iron. Can also be used dry. Water is fed in through a hole in the front of the handle. The dial allows the temperature to be controlled without removing the hand from the handle but gives a bulky and heavy appearance to the iron. Weight 3¼ lb.*

10 SUNBEAM *steam iron. Water is fed continuously from a 40-oz reservoir mounted on a wire attachment about 12 inches above the ironing board. The finger-tip temperature control in the front of the handle is neat and convenient. Weight 2¾ lb.*



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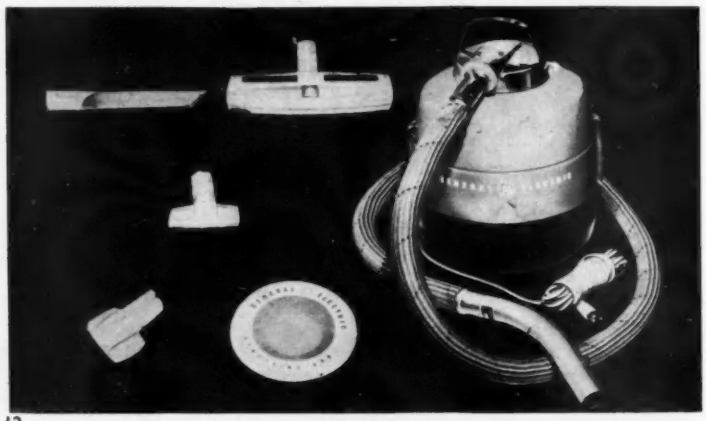
11 FRIGIDAIRE *rotary ironer. This type of powered ironer is unlikely to replace the hand iron though it is particularly useful for 'yards goods' such as sheets and towels.*

Cleaning

The only powered appliance of importance in this field is the vacuum cleaner. In recent years development work has been concentrated on refinement – more powerful suction, quieter motors, handier tools, disposable paper dirt bags. Upright and tank models are both available. The former seem more efficient as rug cleaners, the latter as dusters. Some models come with an assortment of accessories which has nothing to do with the primary functions of a vacuum cleaner. One model will spray paint or insecticide, polish furniture or the car, scour pots, clean silver, shampoo carpets, and even grind knives.

Of the simple cleaners one of the most interesting is the GENERAL ELECTRIC. The lettering of the maker's signature is unusually clear and is now used on all GENERAL ELECTRIC appliances.



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12 GENERAL ELECTRIC *vacuum cleaner. Simple and compact in appearance, efficient and quiet in operation. It has a swivel-top hose connection allowing wide areas to be reached without moving the cleaner. Each dust bag is disposable. The tools are made of plastic.*

13

13 GENERAL ELECTRIC *all-purpose fan. Another example of a design of sensitive shape and careful finish which has many practical qualities as well.*

14

14 GENERAL ELECTRIC *heated blanket. The control unit, housed in a moulded plastic case, is a good example of the imaginative and refined detailing that is sometimes achieved by the American appliance industry.*

DENMARK

Fifty years of antiques

On the death of the Danish silversmith Georg Jensen in 1935 THE TIMES rightly said "He is one of those craftsmen whose pieces may safely be regarded as antiques of the future".

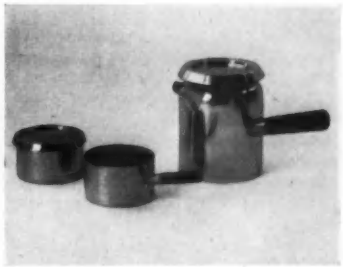
The exhibition, which has been at the Tea Centre in London to mark the 50th anniversary of the establishment of the Jensen workshops in Copenhagen, has clearly shown how a design policy set down by the founder has been interpreted with skill and imagination by his successors and that they continue to produce "antiques of the future". As part of the celebrations, Georg Jensen Silversmiths Ltd, the workshops as opposed to the retail shops, each of which is a private company, offered a number of money prizes to the total value of £1,000 for young silversmiths' designs in the round. The first prize was awarded to Norwegian Tias Eckhof for his range of flatware and cutlery. This encouragement of young silversmiths is part of the design policy conceived by Georg Jensen in his early days and interpreted by the company's present managing director, A. Hostrup Pedersen.

The exhibition, designed by Danish architect Finn Juhl for showing in several cities on a world tour, is a masterly example of the use of texture and colour to set off the objects on exhibition. Even reduced in size and constricted by the site in London, it proved the designer had a complete understanding of the relative importance of setting to the silverware. The success of the exhibition will not only be measured by the many sales and much goodwill for the sponsors but also by the influence it will have on exhibition display design in this country, if not others where it will be shown. P.H.

Tea service of silver designed by Henning Koppel. The handles, bound with brown cane, provide a colour contrast as well as insulation.

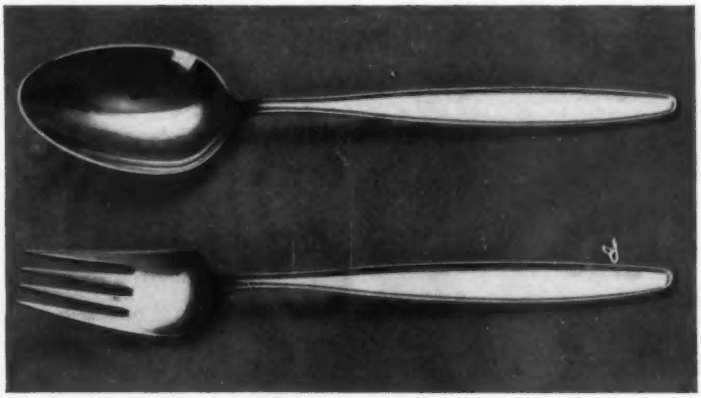
Hair-brush and hand-mirror of silver designed by Grete Jalk and H. Olsen. A prizewinning design in the silversmiths' competition.

Teapot of silver with ivory handle, designed by Jens Andreasen. A prizewinning design in the silversmiths' competition.



Coffee service of stainless steel with ebony handles designed by Magnus Stephensen. The lids have a spring fit.

Spoon and fork of silver, part of a range of silver flatware which won first prize in the silversmiths' competition and was designed by a Norwegian, Tias Eckhof. The competition has attracted a large number of entries and will no doubt stimulate a flow of new designs in this lively Scandinavian craft.



Pointers from the Congress

About 200 business men, public servants and designers attended the Scottish Design Congress in Edinburgh on May 26–27, less than three years after the international congress on design held in London during the Festival of Britain. The assembly was convened by the Scottish Committee of the CoID "to forward the promotion of design as a high level responsibility in Industry, Commerce and the Public Services". The Rt Hon the Earl of Home, Minister of State for Scotland, opened the proceedings.

Main papers were given by SIR THOMAS BARLOW, Chairman of Barlow and Jones, Ltd, and SIR JOHN MAUD, Permanent Secretary of the Ministry of Fuel and Power. Sir Thomas, reviewing post-war trends in production, said that although they are in general not unfavourable to the consumer, the design picture is not "so uniformly beautiful". "As a general proposition," he said, "I think every country gets what it deserves . . . and I am bound to say that as a nation I do not think the English are a very visually sensitive people . . . you cannot absolve the general public of its responsibilities if the present standards are not what they should be. But, of course, their responsibilities are insignificant as compared with those of the producer and, broad and long, it is still not realised by him that design is an organic part of production and not something which is added as a top-dressing." Making a plea for the encouragement of better design standards Sir Thomas laid particular stress on the thorough instruction of "those who choose and market the goods" and on the stimulus of foreign travel. He added: "If you are design-conscious, you cannot be so in patches. The same principles should apply throughout the whole range of your activities . . . the manner of their presentation, the typography you use and many other such functions are an integral part of a firm's design policy and successful marketing."

Public patronage

SIR JOHN MAUD took as his theme 'The State as a Patron of Design'. After tracing the development of public patronage up to the last Coronation he briefly summarised the factors that give rise to hope that the power of patronage will be exercised well: rapid developments in science and technology, which make for flexibility in building; the decline in material well-being; dependence on exports for a living; the diffusion of State patronage among a variety of different bodies; and the spread of public interest in design. "But", he added, "there are giants in the path of public patronage that must be slain. And, first, the monumentality of municipal man."

Education

Sir John went on to say: "The success or failure of the public patron must ultimately depend on individual people. But whether the right people will become available and whether they will prove effective depends . . . on education, for which the State has large responsibilities, and on the organisation of the public bodies concerned and their relations with each other.

"The first condition of successful public patronage, I suggest, is this. At the top level of management there must be someone who cares passionately about design; who knows enough about it to seek advice and help in the right quarter, and who finds time to work for good design himself. . . ." (Here he instanced two successful surveyors of the kings' works – Inigo Jones and Wren.) "The second condition of success is the integration of various specialists into a team which works together from the start of any major project. . . . Thirdly, the problem must be solved of properly relating central and local powers of decision. . . . This devolution problem is not peculiar to central or local government; it must be solved also by the industries that have been nationalised."

Sir John ended with these words: "My personal conclusion is that above all things we must avoid defeatism. As responsible citizens, as gas consumers, as users of electricity or passengers in a railway train or civil aircraft – we all of us have some responsibility today as patrons of design."

Local authority designs

Sir John's paper served as a general introduction to four group papers on specialised aspects of design in public bodies. Speaking of the large local authority, W. T. C. WALKER, Deputy County Architect for the West Riding of Yorkshire, said: "In my own experience in local authority affairs, the user nowadays seems almost to expect some manifestation of contemporary design to be his lot, and does not survey the prospect with forebodings. He wants new things to be much more efficient in performance and gayer in character than he did before the last war." He added, when discussing the economic factors that affect local authority designing, "The real mission of the designer in this context is to produce the very best possible answers within the financial limits of what the community can afford for each particular job. In a number of cases he may not be able to produce the perfect answer because of this limitation; all design created under such conditions should, therefore, be judged by that yardstick and not be absolute standards of excellence."

Exchange visits

"I doubt", said A. G. LING, Senior Planning Officer of the London County Council, "whether local authorities have realised how enormous is their power, the power to create good design and, equally, to produce the second-rate or even add to the muddle and destroy the good that exists." After reviewing progress and possibilities in the field of local authority design, Mr Ling concluded: "There is no better stimulus to good design than good design itself, and if all the articles in everyday use in the local town halls and public buildings are well designed – furniture, the filing cabinets, cups and saucers, lampshades – the pleasure that councillors and officials and the general public will have will be reflected in their approach to the design of new things." Also: "I think it would be a good idea if councillors and their officials arranged exchange visits with other towns where their efforts have achieved public recognition as being of outstanding design."

Design in the streets

A. G. SHEPPARD FIDLER, City Architect of Birmingham, gave his attention wholly to street furniture, in which his authority has shown particular interest. "An immediate improvement can be made in the appearance of our streets if we make a careful selection of the objects required and give thought and careful attention to the placing of these objects in the street scene. One mind, with aesthetic appreciation, should control and advise the many authorities in each area which are responsible for the furnishing of the street."

Hospitals

In his paper on design in the hospital and health services R. LLEWELYN DAVIES, Director of the Nuffield Foundation Division for Architectural Studies, gave an interesting account of the practical research that has been conducted into the function and design of hospitals by a team set up by the Nuffield Provincial Hospitals Trust.

Retail responsibility

Two papers by retail representatives complemented each other admirably. SEBASTIAN EARL, Joint Managing Director of Selfridges Ltd, put what is perhaps the majority view of British departmental storekeepers. "Raymond Loewy points out that a manufacturer must be somewhat adventurous in design or he will be left behind in the race, but he does at the same time advocate to his clients a Fabian policy and the inevitability of gradualism. It is, he says, exceedingly dangerous to adopt an utterly unfamiliar and revolutionary design without any link with what the mass of shoppers have long regarded as familiar and proper to the object designed, however logical that design may be and however greatly its efficiency and appearance may be destined to be admired in the future. Such a design may however be offered with assurance to a public trained to recognise its virtues by another one or two intermediate editions. . . . This does not however relieve even the shopkeeper selling to the masses of the duty of giving his customers the choice of such better-designed goods as he believes that a fair proportion of them would welcome."

Swedish opinion

On the other hand ELIAS SVEDBERG, Chief Architect and Designer of the Stockholm Store Nordiska Kompaniet, showed from the personal experience of his firm how it is possible to build up quickly not merely a retail outlet for the sale of good modern design, but also to link to the shop a factory for the making of such goods. His concluding remarks epitomise the difference between the approaches of the two types of firm. "It is the consistent design policy that is the most telling and it can be achieved by ensuring that designers participate in the whole chain of development. It demands, however, first and foremost a positive attitude towards the design policy from the top management in the enterprise, but it also demands in a . . . high degree a more all-round qualified type of designer, who not only draws, but who also thinks."

Policy in two firms

Two manufacturers, one Scottish and one whose family moved from Scotland to London in the nineteenth century, gave some account of their firms' experiments with design policy. The latter, SIR COLIN ANDERSON, who is a director of Anderson, Green & Co Ltd, drew many stimulating conclusions from the design history of the Orient Line ships, which his company manages; while the former, T. COUGHTRIE, who is Chairman of the Belmos Co Ltd, gave in his paper a very detailed and thoughtful description of the way in which his company redesigned its electrical control gear for use in mining and other industries.

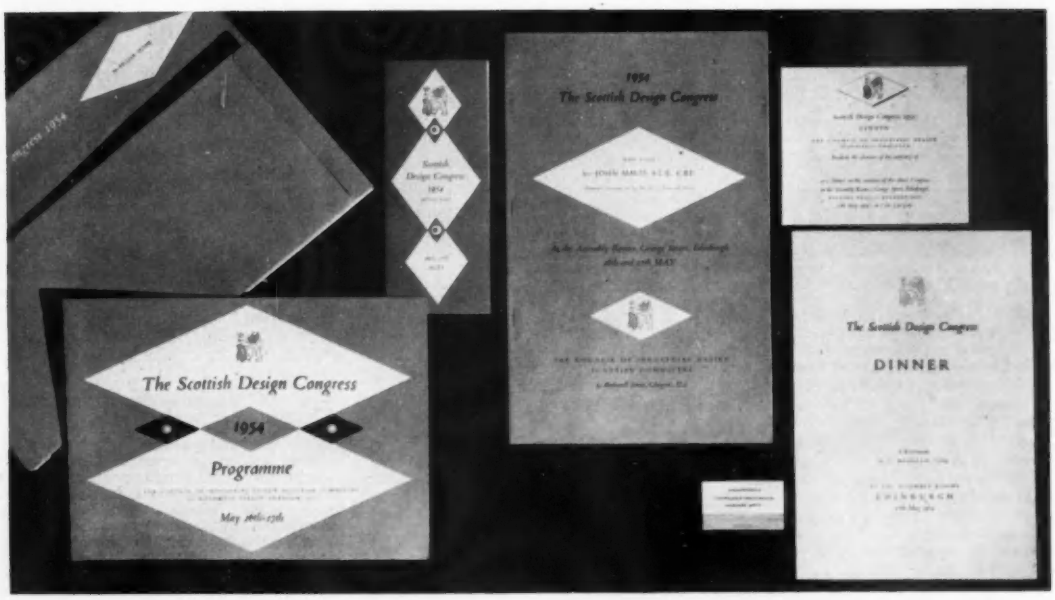
Design for export

Two independent experts made valuable contributions to the discussion. SIR WALTER PUCKEY, President of the Institution of Production Engineers, made in lively terms an engineer's analysis of the requirements of what he called "the Complete Design". From ROGER FALK came a much needed emphasis on the need to study export markets more closely and to bring taste in Britain more closely into harmony with the taste of the more discriminating customers overseas. "If the stimulus is lacking on the home front", he insisted, "it is not hard to see how much more of an effort it needs to be imaginative and aggressive about exports – particularly dollar exports at that."

Other papers

Other papers were given by MISHA BLACK, a director of the Design Research Unit, who made a sound case for the better use of staff and consultant designers in industry; ASHLEY HAVINDEN, a director of W. S. Crawford Ltd, who established the need for industrialists to extend their design policies to advertising; R. T. LAUGHTON, Chairman of the Royal Hotel, Scarborough; and D. A. C. BUTLIN, Director of Public Relations, the National Cash Register Co Ltd.

Range of stationery and printing in two colours for the Congress designed by GORDON HUNTLY



NEWS

Triennale X

The 'Tenth Triennale' will be held in Milan from August 25–November 15. The 'Triennale' is an international exhibition of modern decorative and industrial arts and of modern architecture. The exhibition will consist of different sections – building, town planning, industrial products, design training and foreign displays – linked together by two themes, given in the preliminary programme as "the recognition of the new terms of collaboration existing between the Arts and Industrial production, as the most vital and actually important problem of today, [and] the reaffirmation of the unitarian relationship existing between architecture, painting and sculpture".

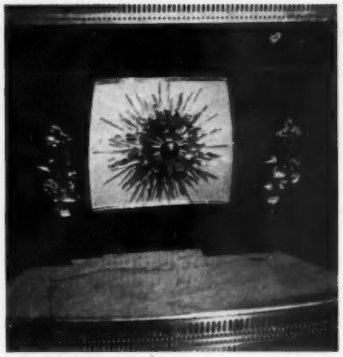
Canadian Trade Weeks

The United Kingdom Trade Commissioner at Winnipeg has reported that the provincial governments of Manitoba and Saskatchewan have proclaimed the week of September 6–11 to be observed as 'British Trade Week' throughout the two provinces. This event, which will be the sixth in succession, is now looked upon as an annual autumn promotion and receives good support from the leading stores, wholesale houses, provincial governments, municipal authorities and the Press.

The 'Trade Week' is essentially a publicity campaign to draw the special attention of the buying public to the British goods available in the local shops and to develop in the minds of the people the need for two-way trade with Britain. Immediate results are not readily discernible, but it is clear the 'Trade Week' helps considerably to stimulate the sales of British goods and this fact has been emphasised many times by the local representatives of United Kingdom firms.

NIDC news

The Canadian National Industrial Design Council is arranging an international exhibition of office settings to be held at the Design Centre, Ottawa, in October. A total of five settings will be displayed with one from Great Britain designed by Robin Day using standard office furniture by S. Hille & Co Ltd. A U S A office is being designed by George Nelson. Two of the Canadian rooms will show a comparison between a typical civil service office of the 1940's and a new office furnished according to revised and improved standards recently formulated by the Department of Public Works in Ottawa. The N I D C has also issued a booklet for retailers containing 95 illustrations of the products which this year have been given design awards for outstanding merit. The object of the booklet is to encourage retailers to consult the Canadian Design Index for the well-designed consumer products which are available on the Canadian market and to make use of the specially designed labels for publicity purposes on products which have received merit awards.



A nautical fire

One of the best of the individual decorative features in the Royal Yacht 'Britannia' is the fire designed by Christopher and Robin Ironside. It is situated in the drawing-room used by the Queen and the Duke of Edinburgh. On either side the black panels decorated with tritons mask the electric elements which are mounted vertically. In the centre of the reflector panel is a 'sun burst' in yellow and white metals. All the interior design in the Royal Yacht was carried out under the general guidance of A. McInnes Gardner & Partners and Sir Hugh Casson.

Beds on show

Representatives of the Press were recently invited to see the new showrooms of Vono Ltd, "the largest manufacturers of sleep equipment in the Commonwealth", as the hand-out puts it. The showrooms, designed by Dennis Lennon, are spacious and lively with the use of bold colours. The idiom of black and gold, first exhibited in the Time & Life Building, is to be found in many places as strip decoration. Behind the public showroom area, a group of offices maintains a simple but effective modern design standard. The general office, right, includes TAN SAD *chairs and* RONEO *filing cabinets. The light fittings are by Troughton & Young (Lighting) Ltd and the decorative contractors were David Esdaile & Co Ltd.*

Royal Designers for Industry

William Lyons, chairman and managing director of Jaguar Cars Ltd, has been appointed a Royal Designer for Industry by the Council of the Royal Society of Arts. Pinin Farina, the Italian car designer, has been appointed an Honorary RDI.

Tube design advice

The leading manufacturers of collapsible tubes (for toothpaste, paint, glue, ointments, etc) have long realised that many of the designs and decorations demanded by their customers are often unduly expensive and difficult to print and that this is largely due to lack of knowledge in the designers or the commercial studios about the problems and limitations of printing colour and text on cylinders. Through their trade association they are therefore offering advice and instructions to designers; they have printed booklets on what to do and what not to do in the interests of speed and economy; and they will provide lectures, film-strips, factory visits for students. Full details can be obtained by the Collapsible Tube Manufacturers' Association, see page 12.

Textile competition

Prizes amounting to nearly £250 are being offered in the 12 sections of the Textile Institute's 1954 design competitions. A total of 188 students is competing for the prize money which is provided by the Institute's funds, the Crompton Memorial Fund, the Beanland Bequest, the Irish Linen Guild, R. Greg & Co Ltd, Houldsworth & Gibb Ltd, and Carpet Trades Ltd. A further £35 is being awarded by the

Lancashire County Council to successful students living in its administrative area. Judging will take place in July and August. Later the prizewinning designs will be displayed at various colleges and institutions throughout the country.

Carpet design competition

All the classes in the annual carpet design competition organised by the magazine FURNISHING are for modern designs. There are four classes and prizes of £10 and £5 will be awarded for each. In addition the Federation of British Carpet Manufacturers is offering a special prize of £60 for the best design submitted.

The competition is open to those in the carpet industry or retail trade, and to present or past students of a recognised college of art or technology in Great Britain or Northern Ireland. No entry form is required. Details can be obtained from the Editor, FURNISHING, Drury House, Russell Street, London WC2, to whom entries should be sent by September 21.

Designer's plaque

An L C C plaque has been fixed to a house in Wardour Street to commemorate the residence there of Thomas Sheraton, the furniture designer who died in 1806.

Kitchen equipment showroom

Opened recently in Regent Street, London, were the new showrooms of Wallis & Co, maker of LEISURE *fitments. The ground-floor display, which is visible from the pavement, is seen above. On the lower ground floor there is a series of demonstration kitchens. The showrooms were designed by Challon & Floyd.*

Scandinavian shows

An exhibition of Scandinavian furniture and furnishings, including new design in pottery, glass, electrical fittings, metalware, etc, will be on show at Heal & Son Ltd, London, until July 10.

Designer-craftswomen

The National Union of Townswomen's Guilds shows, in its recent exhibition at the Tea Centre, that design can be as much the concern of 'top management' in a voluntary organisation as in a business undertaking.

The twenty-fifth birthday of this organisation was marked by a selective exhibition of crafts. Many exhibits, such as lace from Somerset and Scottish hand-weaving, were in the best traditional manner. Others, like the single example of bookbinding, the leatherwork, the sampler-map and, in particular, the beaten-silver jewellery,combined technical excellence with imagination and skill.

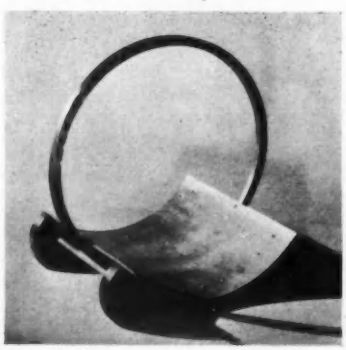
It is obvious that the selectors, Professor R. Y. Goodden, F. H. K. Henrion and Professor Wyndham Goodden, have done their work well, but the high standard of design must have increased their interest.

New pottery designs

A group of earthenware in the Flamingo shape recently introduced by Ridgway & Addesley Ltd with decorations by Peter Cave. They form part of the new range of china and earthenware patterns made by this firm in association with Booths & Colcloughs Ltd, and designed under the guidance of Professor R. W. Baker, head of the School of Ceramics, Royal College of Art. They show the widening influence of modern design in British potteries, spurred on to some extent by the demands of the North American market. It is worth comparing the decoration on the plate, extreme right, with that by Margret Hildebrand for Rosenthal (DESIGN *April page* 30).

A use for off-cuts

With the exception of the handle which can be purchased ready made this fireside log carrier has been designed to make use of off-cuts left over from furniture manufacture. It is of all-plywood construction and is approximately 17 inches high. The prototype was designed by L. G. Jennings.



International wool displays

An international display feature will form part of the International Wool Secretariat's National Display Convention and Exhibition at Horticultural Hall from September 20–24. The feature, which will take the form of a series of special windows with wool products arranged by leading display designers from Italy, Sweden, Switzerland, Germany, France and Great Britain, has been organised in co-operation with the magazine DISPLAY. The object is to stimulate by practical example an improved standard of display as an aid to wool promotion.

Engineering centre

The Birmingham Exchange has opened a permanent exhibition of engineering products at a new Engineering Centre in Stephenson Place, Birmingham. The Centre, which is non-profit distributing, is open to British engineering firms from all parts of the country with display space available on hire for over 200 firms. Home and overseas buyers will be encouraged to visit the Centre which contains a catalogue and technical library, an exhibition hall for private short-term exhibits, lecture rooms for meetings of trade and technical associations, office facilities for visiting executives, and a coffee room. A special feature is a stand design service which will undertake the design and construction of exhibitors' stands. The Centre was opened on June 17.

Booklet on silver

The Worshipful Company of Goldsmiths has issued a booklet, price 1*s*, with 30 illustrations showing recent examples of British silver. The booklet is intended to

encourage greater interest in modern silverware by introducing designers' work to a wider circle of manufacturers and members of the public.

Dublin design show

We are flattered to be associated, in name only, with this catalogue of the 'International Design Exhibition' which opened last month in Dublin. Few readers of DESIGN *of two years ago can fail to be reminded of our title as it was then set in Perpetua italic. Here the typography is by Jock Kinneir for Design Research Unit of Ireland, the producers of the exhibition for An Chomhairle Ealaion (The Arts Council in Ireland).*

BOOKS

Better Homes Book, *edited by Roger Smithells,* NEWS OF THE WORLD, 8s 6d

This is intended as a complete guide to anyone setting up a home, and offers detailed advice on every aspect from the choice of the district and the house to the purchase of all items of furniture including glass and china and the 'finishing touches'. It takes the reader cheerfully and chattily through all the vicissitudes of dealing with estate agents, architects, bank managers, insurance companies, builders, decorators, and many others.

Much of the technical advice is excellent, particularly the sections about bedding, floor coverings, domestic equipment and main services. There is useful background knowledge on period furniture and furniture construction, and helpful figures for hire purchase and building society loans. The text is amply illustrated with photographs and drawings, and there is a full and clear index for casual reference.

It is for information on aesthetics that the book deserves adverse criticism. It underrates the present level of public taste and tends to lag behind rather than stimulate and lead it. The authors could have aimed at a higher standard without in any way becoming 'extreme'. The introduction claims that the book will show the homemaker all that is best in modern design but the main text does not fulfil this promise.

The appendix giving fifteen colour schemes omits so many essential factors for planning the decoration of a room that it cannot be of any real value, and several of the schemes advocate an unimaginative use of colour.

The choice of the illustrations throughout the book is uneven and they do not always do justice to the text. Too many of them are out of date, and some illustrate a trend in design which is far from good, either modern or traditional.

Despite these criticisms, the publishers deserve thanks for presenting in simple language information and hints on a complicated subject for a section of the public whose interest in home-making is constantly increasing. JOAN PATTRICK

Keyboard Typefaces, *Chiswick Press*

This is no ordinary collection of type sheets but a well-bound book of 12 keyboard typefaces, each shown as a complete fount in Roman, italics and bold face with specimen settings of each size set to the same measure as an aid to casting off. Each of the examples is printed on a paper which is considered the most appropriate for the particular face concerned. The historical notes are of value to the student and the house style is another example of the increasing practice among printers of making sure they know their own style and trying to stick to it. A different style can be detected in the very good compliments slip which accompanied the book and which one suspects is the work of a new hand. P.H.

Printer's Guide and Directory 1954, *Holbyrne & Co Ltd,* 7s 6d

For those who buy print and have either a long or short memory, this comprehensive directory with its easily defined information will be a very valuable book of reference. The details are complete and helpfully grouped alphabetically into counties. P.H.

Public house redecorated

The illustration shows the dining-room of the White Swan in Tudor Street, London, the exteriors and interiors of which have recently been redesigned by Lucy Halford of T H M Partners. A scheme of dark olive green, which is carried through on the walls, curtains and carpet, was chosen for this room and contrasts with the bright red chair coverings and lampshades. An interesting selection of prints and drawings, collected by the designer, lends a warm and inviting atmosphere.

Designers in this issue

Dr Bengt Åkerblom (18, 19, 21). Professor R. W. Baker, ARCA (43). Misha Black, OBE, FSIA, M Inst RA (DRU). Peter Cave (43). Oliver Cox, ARIBA, AA Dipl (20). Robin Day, ARCA, FSIA (42). Gunnar Eklöf (19). Pinin Farina, Hon RDI (42). David Fowler, MSIA (20). Professor R. Y. Goodden, RDI, AA Dipl, ARIBA, FSIA (43). Professor Wyndham Goodden, OBE (43). Lucy Halford (44). Peter Hatch, MSIA (art editor). F. H. K. Henrion, MBE, FSIA (cover, 43). Margret Hildebrand (43). Gordon Huntly, MSIA (41). Christopher Ironside, MSIA (42). Robin Ironside (42). L. G. Jennings (43). Georg Jensen (39). Finn Juhl (39). Charles Kenrick (44). Jock Kinneir, MSIA (44). Albrecht Lange (21). Dennis Lennon, MC, ARIBA (42, 44). Raymond Loewy, SID (41). William Lyons, RDI (42). David Medd, ARIBA, AA Dipl (20). Hans Mitzlaff (21). P. F. Schneider (21). Elias Svedberg (41).

Designers' addresses may be obtained from the EDITOR.

Corrections

March, page 7: It should have been made clear in the caption to the photograph that the recent alterations by Dennis Lennon to Charles Kenrick's original design concerned only a change of curtains and covers. These would normally need replacement after a period of three years.

On page 14 of May DESIGN an illustration appeared of a machine tool designed and made by B S A Tools Ltd. We have been requested to state that the machine illustrated was not an automatic lathe, but a single-spindle automatic chucking machine built in 1948 as a special-purpose machine to meet a customer's specification, and incorporating special tooling and attachments. These points were not made clear in our caption, nor was it stated that both guards and covers had been removed from the machine to show constructional and operating details. We express our regrets for any inconvenience caused to B S A Tools Ltd.